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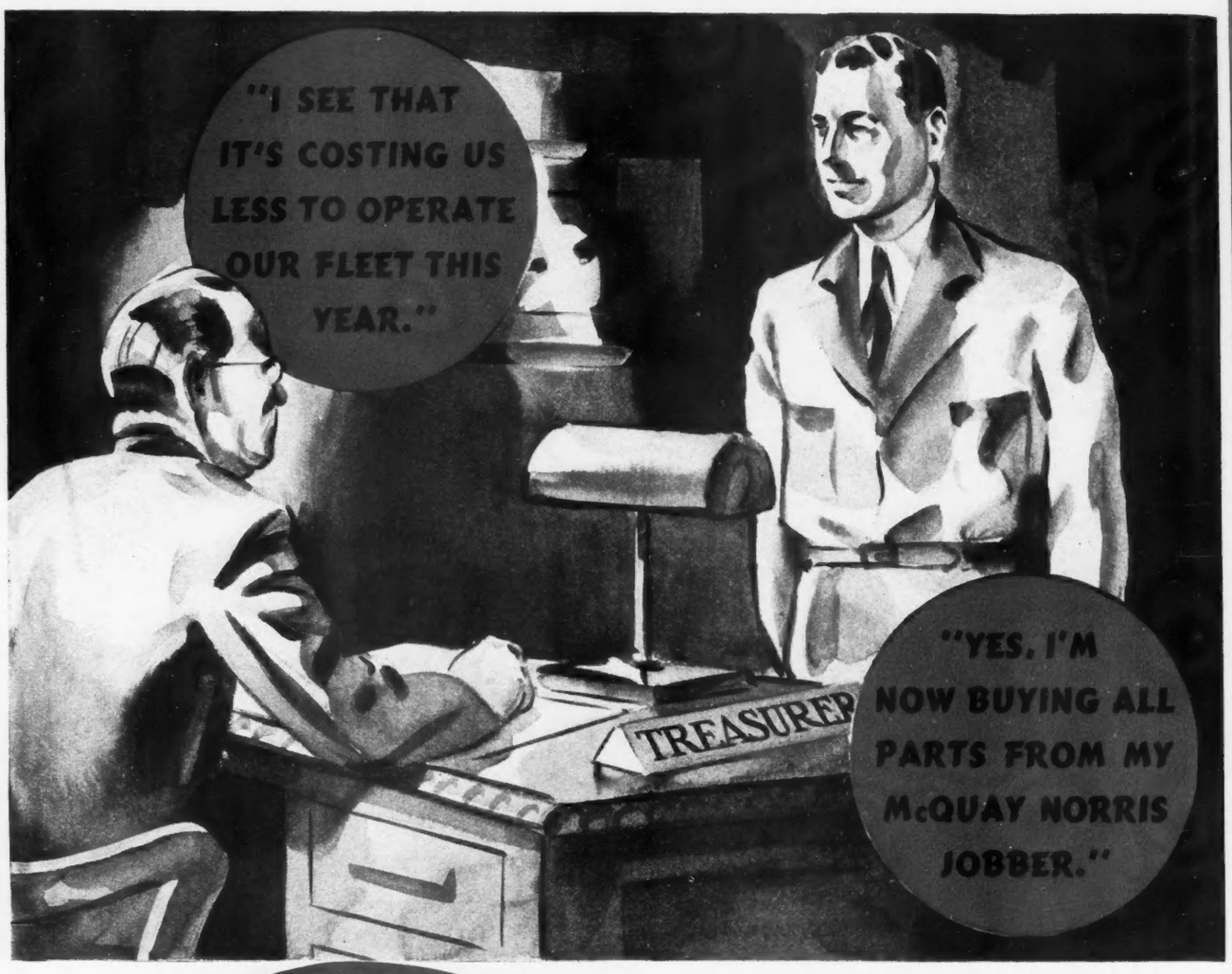
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COMMERCIAL CAR JOURNAL
VOL. LIV NO. 2 OCTOBER 1937

EARS TO THE GROUND

Diesel Document

What with the shows and one thing another coming on this department was prepared to be amazed at nothing. Nevertheless one of our agents has sent in a report on the preliminaries to an announcement that has seriously disturbed our complacency. It concerns a new diesel engine of 226 cu. in. which will be shown at most of the industry's conclaves where fleet men gather. Our man even got details. It will have a bore and stroke of 4 in. by 4½ in., 4 cyl., 155 ft. lb. torque at 1500 r.p.m. and 65 hp. at 2600 r.p.m.

Willys Wager

Our agent in charge of bigger-and-better things says that there are reports that Willys will have a 1½-ton truck before the flowers bloom again. The railbirds have it that the truck will incorporate the celebrated Willys engine but that the rest of the truck will be the pride and joy of another factory. Perhaps both will sell it.

Midwest Models

We like to be considered a hero by our field force but we lost this honored position to the engineer of a small truck factory, in the opinion of at least one agent. Said engineer is building a new truck model designed especially to handle a snow plow, changing the make of gasoline engines used throughout his entire line and pioneering for the truck industry the use of a diesel engine in new C.O.E. models that has up to now appeared only in industrial and farm tractors. The automotive diesel engine is in itself a new design showing 100 hp. at 1800 r.p.m.

Lift Lament

If some of the striking brethren will decide to produce instead of parade and go back to work there will soon be announcement of a new four-post lift. In the meantime the manufacturer hangs out a sign "no information today."

C.O.E. Coming

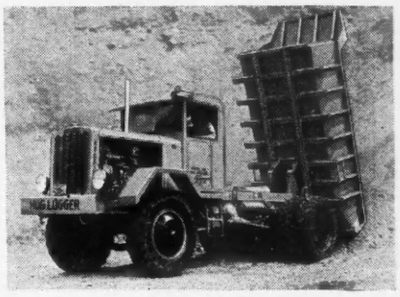
Going into the nursery this department finds that a baby camelback has been born and will be ready for adoption by such foster parents as have something less than $1000. This figure, which is probably high, is a maximum in lieu of more accurate price knowledge, will include a panel body. A companion conventional pick-up truck will sell at less than $600 again including all equipment.

Regroove Ritual

Encouraged by the increase in regrooving one of the manufacturers of regrooving equipment has redesigned his entire line of equipment but up to press time we could not learn what "redesigned" means.

Air Aria

One of the 1938 passenger cars will be equipped with what the manufacturer chooses to call an air conditioning unit. It will be an air intake through the cowl ventilator, a heater and a filter pad through which the air will pass.



Incorporating all the features of its well-known larger brother, this Model 20 Hug Lugger, was recently introduced by the Hug Co., Highland, Ill. It's fitted with an 8 cu. yd. body, high-dumping-angle hoist and Caterpillar Diesel engine. Electric arc welding is used throughout the chassis.

Announcement Advice

Our field force is concentrating on new models and we are advised that Dodge, Chevrolet, Federal, G.M.C. and Hudson will be ready with announcements any moment now, which information we pass on to you.

Tire Teaser

This department is guessing at 90 days as the time that will elapse before a new truck tire is announced. When the announcement comes it will say that the tires will run cooler and that they will provide better stopping ability as a result of a patented tread. Of course there will be words about better wearing qualities.

New York City's the country's greatest flower market and down in Norfolk, Va., they don't fool when they grow gladioli. For the long 327-mile run, carbon dioxide ice, furnished by the Mathieson Alkali Works, keeps Greenbrier Farm trucks cool and the flowers in shape—5000 doz. to the load.

Model D-2 Station Wagon is a new-comer to the International line. It has a seating capacity of 7 to 8 and a load capacity of 2100 lb. Bore and stroke of the 6-cyl. engine is 3 5/16 in. x 4⅛ in. It develops 78 maximum brake h.p. at 3400 r.p.m. and a maximum torque of 155 lb. ft. at 1000 r.p.m.

FREE

Some more pieces of worthwhile literature, coming to our attention within the past month, are grouped under the heading of Literature on page 40. Check the numbers below which correspond to the numbers given the literature described, and we'll see that you are supplied. Mail to the Editor, Commercial Car Journal, Philadelphia, Pa.

11 ☐ 12 ☐ 13 ☐ 14 ☐
15 ☐ 16 ☐ 17 ☐ 18 ☐

Name .....
Title .....
Firm Name .....
Address .....
City .....
No. Trucks ..... No. Cars .....

OPERATORS' OPINIONS IN ABILITY FACTOR SURVEY

Identification Number	Vocation	Survey Question: Location	No. trucks operated	No. tractors	No. trailers	1 Is slow-moving vehicle a hazard on hills	2 Do you favor ability factor adoption	3 What ability factor do you favor	4 % Your trucks meeting factor favored	5 Years' grace needed to conform	6 Ability factor you now specify for hills	7 % your trucks meeting 4% @ 20 factor	8 Effect of 4% @ 20 m.p.h. ability factor on your: Maintenance costs	8 Effect of 4% @ 20 m.p.h. ability factor on your: Total operating costs	9 Is speeding up of trucks economically imperative
90	Common Carrier	MA	10	4	6	Yes	Yes	5% @ 20	80%	3 Yr.	5% @ 20	80%	None	Increase 10%	Yes
91	Common Carrier	MA	x	x	x	Yes	Yes	4% @ 15	(1)	2 Yr.	None	50%	x	x	Yes
92	Common Carrier	MA	12	1	3	Yes	Yes	4% @ 20	30%	3 Yr.	None	30%	Don't know	Don't know	Yes
93	Common Carrier	MA	90	63	63	(2)	No	x	50%	3 Yr.	None	50%	Increase	Increase	No
94	Common Carrier	S	120	0	0	Yes	Yes	4% @ 20	100%	None	x	100%	None	None	x
95	Common & Contract	MW	25	3	3	Yes	Yes	4% @ 20	x	2 Yr.	x	x	x	x	Yes
96	Common Carrier	NE	16	6	8	No	No	4% @ 15	86%	5 Yr.	None	86%	None	Slight diff.	Yes
97	Common Carrier	MA	8	0	0	Yes	Yes	4% @ 20	62½%	2 Yr.	None	62½%	Very little	Increase	Yes
98	Common Carrier	MA	15	0	0	No	No	4% @ 15	100%	3 Yr.	4% @ 15	50%	x	x	Yes
99	Common Carrier	MW	5	10	11	Yes	Yes	4% @ 40	100%	None	x	100%	(3a)	(3b)	Yes
100	Common Carrier	MA	8	0	0	Yes	Yes	4% @ 20	100%	None	4% @ 20	100%	None	None	Yes
101	Common Carrier	MW	6	5	12	Yes	Yes	4% @ 20	25%	3 Yr.	None	25%	Prob. Increase	Increase	Yes
102	Common & Contract	MW	5	4	5	Yes	Yes	4% @ 20	(4)	None	x	50%	x	x	Yes
103	Common & Contract	MA	5	9	11	Yes	Yes	4% @ 20	75%	3 Yr.	4% @ 20	75%	Increase	Increase	Yes
104	Common Carrier	MW	14	30	30	Yes	Yes	4% @ 20	100%	None	None	100%	None	None	Yes
105	Common Carrier	NE	7	8	11	Yes	Yes	4% @ 20	85%	(5)	4% @ 20	85%	None	Increase	x
106	Common Carrier	MA	21	12	26	(6a)	Yes	4% @ 15–20	80%	4 Yr.	None	80%	None	None	(6b)
107	Contract Carrier	MW	6	9	20	Yes	Yes	4% @ 20	80%	2 Yr.	None	80%	None	None	Yes
108	Common Carrier	MA	20	1	2	Yes	Yes	4% @ 20	90%	5 Yr.	x	90%	Increase	None	Yes
109	Common Carrier	MW	6	2	2	Yes	Yes	10% @ 25	25%	1 Yr.	None	25%	None	x	Yes
110	Contract Carrier	MW	3	25	29	Yes	Yes	4% @ 20	85%	5 Yr.	4% @ 20	85%	Lower	Lower	Yes
111	Contract Carrier	MW	8	12	14	Yes	Yes	6% @ 25	75%	x	6% @ 20	100%	None	None	Yes
112	Common & Contract	MW	24	45	73	Yes	Yes	4% @ 20	10%	2 Yr.	None	10%	x	x	Yes
113	Common Carrier	MA	18	17	17	Yes	Yes	4% @ 20	50%	2 Yr.	4% @ 20	50%	Lower	Lower	Yes
114	Common Carrier	MW	15	44	44	Yes	Yes	4% @ 20	75%	1 Yr.	None	75%	Doubtful	Doubtful	Yes
115	Common Carrier	MW	6	3	4	Yes	Yes	3% @ 20	60%	5 Yr.	x	60%	Increase	Increase	No
116	Common Carrier	MA	18	16	16	Yes	Yes	3% @ 25–30	100%	1 Yr.	500 cu. in.	75%	Lower	Lower	Yes
117	Common Carrier	x	17	6	9	Yes	Yes	4% @ 20	33⅓%	6–7 Yr.	x	33⅓%	Very little	Lower	Yes
118	Common & Contract	MW	2	6	6	Yes	Yes	25–30 m.p.h.	12½%	1 Yr.	5 m.p.h.	12½%	Lower	None	Yes
119	Common Carrier	NE	4	4	6	No	Yes	20 m.p.h.	100%	x	x	100%	None	None	Yes
120	Common & Contract	MW	2	30	30	No	No	10 m.p.h.	75%	4 Yr.	10 m.p.h.	15%	None	Increase	No
121	Common Carrier	NE	10	7	8	Yes	Yes	4% @ 20	60%	3 Yr.	2% grade	60%	Increase	x	Yes
122	Common Carrier	MW	15	12	38	Yes	Yes	x	50%	3–5 Yr.	None	None	Increase	Prob. none	Yes
123	Common Carrier	MW	15	16	18	No	No	None	x	5 Yr.	None	None	Increase	Increase	No
124	Common Carrier	MA	12	2	2	No	No	x	x	5 Yr.	x	x	Increase	x	Yes
125	Common Carrier	MA	14	2	3	No	Yes	x	100%	x	30 m.p.h.	100%	None	x	Yes
126	Common Carrier	MW	20	34	44	Yes	Yes	x	100%	x	x	x	x	x	Yes
127	Common Carrier	MW	8	7	8	Yes	Yes	20 m.p.h.	90%	3 Yr.	None	90%	None	None	Yes
128	Common Carrier	MW	3	40	42	Yes	Yes	x	75%	2 Yr.	None	x	x	None	No
129	Common Carrier	MA	15	7	7	(7)	Yes	5%	100%	None	10%	100%	Lower	Lower	Yes
130	Common Carrier	MW	1	13	14	Yes	No	15 m.p.h.	100%	None	None	100%	x	x	Yes
131	Common & Contract	MW	5	7	10	Yes	Yes	x	20%	3–4 Yr.	x	20%	Increase	None	Yes
132	Common Carrier	MW	7	1	2	Yes	Yes	x	100%	None	x	100%	Increase	x	Yes
133	Common Carrier	MA	7	1	2	(8a)	No	x	x	x	(8b)	50%	x	x	Yes
134	Contract Carrier	MW	4	6	6	Yes	Yes	x	x	5 Yr.	x	50%	x	x	No
135	Common & Contract	MA	60	3	3	No	Yes	25 m.p.h.	50%	4 Yr.	x	50%	x	x	Yes
136	Common Carrier	x	5	61	61	Yes	No	x	65%	5 Yr.	None	50%	Increase	Increase	No
137	Common & Contract	MW	5	19	57	No	No	x	x	x	x	50%	Increase	Increase	No
138	Common Carrier	MW	32	43	43	Yes	No	x	x	x	x	100%	None	None	Yes
139	Common Carrier	MW	18	21	20	Yes	Yes	x	95%	3 Yr.	4% @ 15	80%	None	Lower	Yes
140	Common Carrier	MW	7	1	1	No	No	x	x	x	x	None	Increase	x	x
141	Public Utility	MW	400	0	0	Yes	Yes	2% @ 20	80%	4 Yr.	2% @ 20	10%	Increase	Increase	Yes
142	Dairy Products	PC	90	2	2	Yes	Yes	3% @ 30	10%	5 Yr.	None	10%	Lower	Lower	Yes
143	Public Utility	NE	456	0	0	Yes	Yes	4% @ 20	95%	3 Yr.	None	95%	None	None	x
144	Department Store	MW	119	0	0	Yes	Yes	(9)	x	x	x	x	Lower	Lower	Yes
145	Municipal	MW	247	45	329	Yes	Yes	3–4% @ 20	10%	3 Yr.	None	10%	None	None	Yes
146	Bakery (Wholesale)	MW	150	0	15	Yes	Yes	4% @ 20	98%	2 Yr.	4% @ 20	50%	Very small	Very small	No
147	Fire Department	NE	211	0	0	Yes	Yes	4% @ 20	95%	5 Yr.	4% @ 25	95%	None	None	Yes
148	Truck Rental	NE	350	5	5	Yes	Yes	4% @ 20	90%	x	None	90%	Increase	Increase	No
149	Military	MA	15000	122	122	Yes	Yes	4½% @ 20	(10a)	x	(10b)	(10a)	None	x	Yes
150	Petroleum	MA	150	2	2	Yes	Yes	4% @ 20	80%	3 Yr.	(11)	80%	Lower	Lower	Yes
151	Highway Maint.	PC	1375	7	7	Yes	Yes	6% @ 20	75%	6 Yr.	None	90%	None	Lower	Yes
152	Petroleum	MA	90	12	12	Yes	Yes	4% @ 20	15%	4 Yr.	3% @ 20	15%	Lower	Lower	Yes
153	Public Utility	MA	300	0	0	Yes	Yes	4% @ 20	100%	None	None	100%	None	None	No
154	Brewery	MW	120	17	47	Yes	Yes	4% @ 18	20%	2 Yr.	None	15%	x	x	Yes
155	Public Utility	PC	450	0	20	Yes	Yes	2% @ 10	40%	5 Yr.	None	25%	Increase	None	Yes
156	Highway Maint.	MW	400	3	6	Yes	Yes	Speed	100%	None	Power	85%	Lower	Lower	Yes

X—No answer

(1) Most if loaded within capacity limits

(2) Not if other motorist shows consideration

(3a) Lowered to 4% @ 20 would increase cost ⅓

(3b) 4% @ 20 would slow time 20% and therefore increase costs proportionately

(4) 100% if loaded to rated capacity

(5) All our trucks will meet 4% @ 20 factor in next 6 months

(6a) Not if passing law is enforced

(6b) Increased speed won't help this condition as much as other factors (see article)

(7) No—if law is obeyed

(8a) Yes—on 2-lane road

(8b) Only that of prohibiting overloading above maker's rated capacity

(9) Larger motors with overdrive transmission or dual ratio in differential

(10a) Most vehicles purchased since Jan., 1934

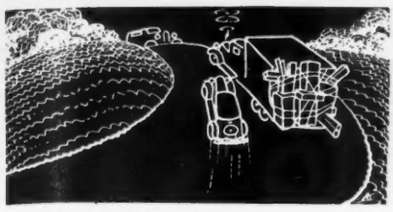
(10b) 5% grade ability in high gear without tow; 3% grade in high gear with towed load

(11) 3% in direct or that gear which has top speed of at least 30 m.p.h.

LOCATIONS

NE—New England
MA—Middle Atlantic
MW—Mid West
SE—South East
S—South
SW—South West
NW—North West
RM—Rocky Mountain
PC—Pacific Coast
US—United States

FOR-HIRE OPERATORS ALSO SAY SLOW MOVING VEHICLES ARE A SAFETY HAZARD AND TAKE A STAND IN REGARD TO



DISCUSSION CONDUCTED BY

George J. Hook, EDITOR

ABILITY FACTORS

LAST month the ability factor opinions of 89 fleet operators in a variety of vocations were published. This month the opinions of 51 for-hire operators and 16 operators in other vocations are tabulated.

A special effort was made to get the viewpoints of for-hire operators in long-distance, over-the-road operations. Fleets in the New England, Middle Atlantic and Mid-western states were covered first. Questionnaires have gone out to for-hire operators in the Rocky Mountain and Pacific Coast states and their replies will be tabulated in December.

Because of the special interest in the opinions of for-hire operators these are summarized separately. In addition, there is a grand summary covering all operator opinions received to date.

FOR-HIRE SUMMARY

51 Fleet Operators Participating

SURVEY QUESTION 1—38 considered a slow-moving vehicle a safety hazard on hills; 11 said they did not; 2 said not if the law is enforced or obeyed.

SURVEY QUESTION 2—39 favored the adoption of an ability factor to make trucks move faster on hills; 12 did not.

SURVEY QUESTION 3—18 favored an ability factor of 4 per cent grade at 20 m.p.h.; 4 definitely favored a factor higher than 4 at 20; 1 favored 4 per cent at 15-20; 5 definitely favored a factor lower than 4 at 20; 1 did not favor any factor; 7 gave inadequate replies, and 15 made no answer.

SURVEY QUESTION 4—26 operators said 75 to 100 per cent, inclusive, of their present trucks could meet the factor they favored; 2 others in this group qualified their opinion with "if loaded to rated capacity"; 16 said under 75 per cent, and 7 did not answer.

SURVEY QUESTION 5—8 asked no time extension to meet the factor they favored; 21 asked from 6 months to 3 years, inclusive; 14 asked more than 3 years, and 8 did not answer.

SURVEY QUESTION 6—5 said they now specify a 4 at 20 factor; 2 said they specify higher than 4 at 20; 2 specify a lower factor; 18 do not specify; 7 gave inadequate replies, and 17 gave no answer.

SURVEY QUESTION 7—23 said from 75 to 100 per cent of their present equipment would meet the 4 at 20 factor with loads they are now carrying; 24 said less than 75 per cent would meet it, and 4 gave no answer.

SURVEY QUESTION 8—15 said their maintenance costs would not be affected by the imposition of a 4 at 20 factor; 5 said they would be lower; 3 said the effect would be slight; 1 said the effect was doubtful; 15 said maintenance costs would be increased; 1 said he didn't know, and 11 gave no answer.

13 said total operating costs would not be affected; 7 said they would be lowered; 1 said the effect would be slight; 1 said effect was doubtful; 12 said total costs would be increased; 1 didn't know, and 16 gave no answer.

SURVEY QUESTION 9—39 said speeding up of trucks was economically imperative; 8 said it was not; 1 was indefinite, and 3 gave no answer.

GRAND SUMMARY

156 Fleet Operators Participating

SURVEY QUESTION 1—132 said "Yes" they personally consider a slow-moving vehicle a safety hazard on hills; 21 said "No"; 1 said "trucks no," "tractor-trailers yes"; 2 said "No, not if the law is enforced or obeyed."

SURVEY QUESTION 2—134 said "Yes" they favored the adoption of an ability factor to make trucks move faster on hills; 18 said "No"; 1 said it was not practical, and 3 gave no opinion.

SURVEY QUESTION 3—66 definitely favored an ability factor of 4 per cent grade at 20 m.p.h.; 15 favored a higher factor; 18 favored a lower factor; 5 wavered between 3 and 4 per cent at 15 to 20 m.p.h.; 2 favored 4 at 20 for trucks and 2 per cent and 3 per cent at 20 for trains and six-wheelers; 3 did not favor any factor or found it impractical; 17 gave inadequate replies, and 30 did not answer the question.

SURVEY QUESTION 4—88 said that 75 to 100 per cent, inclusive, of their present trucks could meet the factor they favored; 2 others in the above group qualified their opinion with "if loaded to rated capacity"; 41 gave replies under 75 per cent; 1 gave an indefinite answer, and 24 gave no answer.

SURVEY QUESTION 5—33 asked no time extension to meet the factor they favored; 60 asked from 6 months to 3 years, inclusive; 40 asked more than 3 years; 23 gave no answer.

SURVEY QUESTION 6—21 said they now specify an ability factor of 4 per cent at 20 or better; 16 specify a lower factor; 67 said they do not specify a factor; 16 gave inadequate replies; 1 gave a variable, and 35 gave no answer.

SURVEY QUESTION 7—90 said from 75 to 100 per cent, inclusive, of their present vehicles would meet an ability factor of 4 per cent grade at 20 m.p.h.; 51 said less than 75 per cent; 1 gave an inadequate reply, and 14 did not answer.

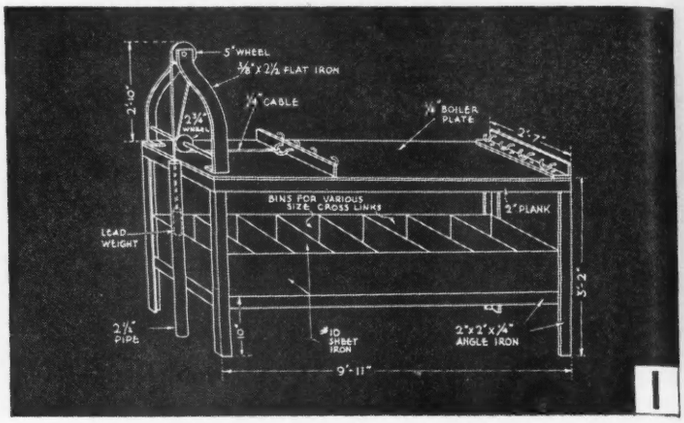
SURVEY QUESTION 8—81 replies indicated maintenance costs would either not be affected or would be lowered by the imposition of a 4 at 20 factor; 10 said the effect would be very slight; 32 said definitely maintenance costs would increase; 1 said effect was doubtful; 1 didn't know; 1 said old trucks would be eliminated, and 30 gave no answer.

64 replies indicated total operating costs would either not be affected or would be lowered; 7 said the effect would be slight; 31 said they would be increased; 1 was doubtful of the effect; 1 didn't know; 52 gave no answer.

SURVEY QUESTION 9—112 operators said "Yes" speeding up of trucks was economically imperative; 25 said "No"; 1 replied indefinitely, and 18 gave no answer.

VEHICLE COUNT—93,297 trucks; 8744 tractors; 6135 trailers.

Turn to Page 84, Please For Operators' Comments



1

SHOP HINTS FROM FLEET SHOPS

1. Skid Chain Bench

By E. SCHULTZ

Abbotts Dairies, Inc.
Philadelphia, Pa.

WE have developed a skid chain bench with which two men are able to repair all of the broken chains from our fleet as the trucks come in to be gassed, oiled and washed. Previously it sometimes took the inspectors all night and would hold up the loading in the morning. In addition we are spared the expense of carrying extra sets of chains.

The only tools that are used are two heavy-duty chain pliers which enables us to remove and install the cross chain as the complete chain is stretched out on the bench under tension. The old hammer and chisel technique with its accompanying injuries to men is completely done away with.

2. Engine Crack Repair

By DONALD A. EATON

Seaside Oil Co., San Jose, Cal.

I HAVE been able to put several engine blocks back on the road after they were cracked from valve seat to cylinder and in some cases as far as 1 in. down the cylinder. This was done by tapping out a hole in the crack for a 10-32 machine screw. The hole was not tapped full depth but the screw was permitted to bottom and was then cut off flush. Overlapping this screw another hole was tapped and another screw was fitted until the whole crack was filled with overlapping machine screws. It is not necessary to use white lead or shellac on the screws as they effectively seal the crack themselves.

3. Removing Flush Bearing

By FRED JOHNIGK

Keystone Steel and Wire Co.
Peoria, Ill.

WHEN an anti-friction bearing is mounted on a flanged shaft where you cannot get a puller on the inner race, frequently the ball retainer breaks from attempting to pull the bearing from the outer race. When this happens remove the balls and place outer race over inner race as illustrated. Put as many balls in the bearing as you are able to get in and then space them equally around the bearing and the outer race will hold the puller without coming off.

4. Locating Blind Holes

WHEN you have holes to lay out which are hard to locate a set of steel balls in each of the matching holes and a light tap with a hammer will make a mark plain enough to center the punch at the correct spot. It is especially good for tapped holes.

5. Skid Chain Stretcher

By WILLIAM STAIB

Purity Bakeries, Newark, N. J.

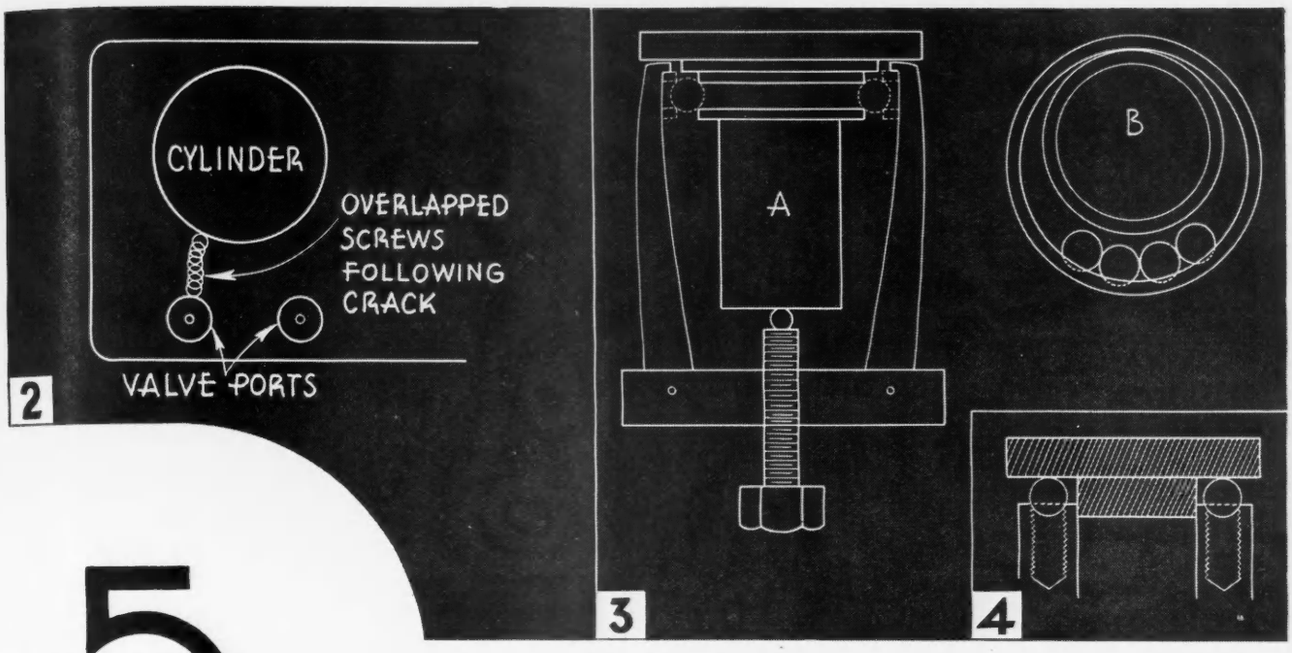
AT the first sign of snow our trucks are equipped with skid chains and that means that chains must be repaired every night they are on. To speed up the repair work we have made a portable tool which has worked very well. The ends of the chain needing repairs is hooked onto the ends of the springs on the ends of the tool with the chain laid out over the two U beams. The springs prevent the chain from shifting and the cross links can be worked on easier. The inside of the U beams are fitted with wood so that the metal does not touch the floor. The beams are fastened together by adjustable pieces of flat iron making it possible to adjust the tool for any size chain.

6. Dual Tire Spacer

By BILLIE BURGAN

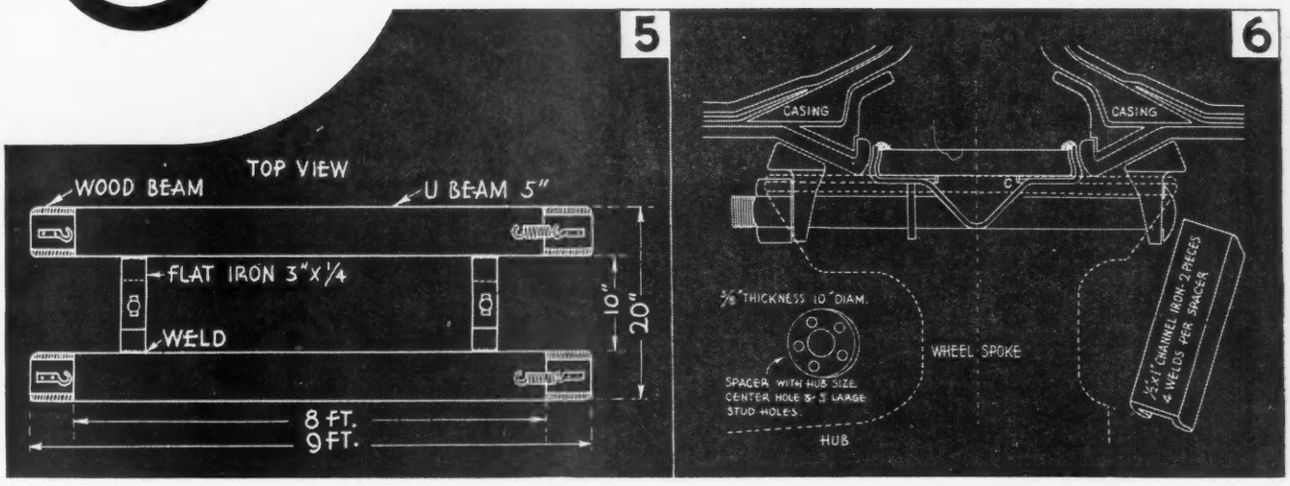
Hage's Ice Cream Co., Ltd.
San Diego, Cal.

FREQUENT tightening of lug nuts did not hold tires for long because one side of the spacer usually worked up toward the center and got off the check in the wheel spoke at C. Then another spacer follows suit and soon all have failed releasing tires. With the reinforcement illustrated the lug bolts pull



5 Dollars

Will Be Paid by Commercial Car Journal for Each Shop Hint Accepted. Ideas Count — No Matter How Rough. We Will Polish Them Up For Publication



up solid and the spacer cannot cup against the channel as the spacer is held wedged securely by the lug bolts. Incidentally we spaced out some of our duals that were too close and actually chafed when the pressure dropped a little by inserting a round piece of boiler plate 10 in. in diameter with a center hole hub size. Stud holes were drilled in the 3/8 in. boiler plate.

7. Removing Chevrolet Pulley

By HOWARD DOUGLAS

McEwen's Laundry, Inc.
Nashville, Tenn.

PLACE a standard hand crank in pulley as if to start engine. Put sufficient clockwise pressure on the crank handle to hold it in place and strike with a 2-lb. hammer. This procedure will seldom fail to remove the pulley.

8. Replacing Valve Spring

By ROY G. VALENTINE

Sewaren, N. J.

ALL that is necessary to remove a broken valve spring from an overhead valve engine is to turn the engine until the piston is on top center at the end of the compression stroke. Leave shift lever in low and set hand brake. Remove the spark plug and insert compressed air hose. Valve in just enough air to hold the valve in place, which will enable you to remove valve key and broken spring. Replace with new spring, push spring and retainer down with screwdriver and insert key.

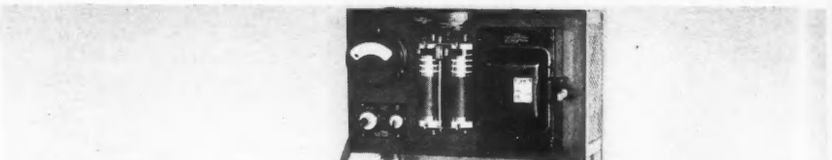
9. Brake Grease Retainer

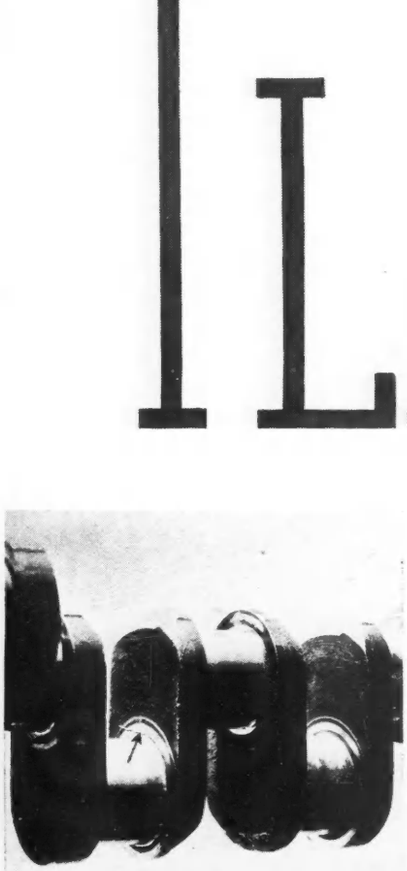
By A. TURGEON

Greens Storage Warehouses
Fall River, Mass.

WE operate a fleet of Fords and we find that the front brakes chatter as a result of grease working its way through the kingpins, through the brake plate and down onto the brake shoes. To remedy this situation we remove the brake shoes and anchor bolt and take out the brake push rod. Then we put a flat washer on the push rod and then a spring about 1 in. long and then another flat washer. On top of the flat washer we place a felt washer about the size of a half dollar which prevents grease from working on to the brake shoes.

FINDING HIDDEN FLAWS FLOORS FAILURES





The Magnaflux powder may be seen above outlining the location of a hidden flaw at the edge of a crankshaft bearing surface. Below it and to the left of the shaft weld the powder lines up a critical imperfection. At top of page is the electro magnetizing unit. The leads shown in front will be attached to opposite ends of the crankshaft.

"Magnaflux" Helps Metropolitan Fleet Reduce Road Failures 89 Per Cent in Four Years

By Henry Jennings

Technical Editor, Commercial Car Journal

EVERY vehicle belonging to the Surface Transportation Co. of New York has its steering apparatus tested at each 2500-mile inspection with the Magnaflux system of crack detection. Once every year every part of the chassis with the exception of the frame is tested separately by the same method. W. J. Cumming, who operates the Surface Transportation Co. fleets, has come to think of it as his most valuable piece of equipment.

This equipment will locate surface cracks visible or invisible to the naked eye and it will locate cracks as deep as 2 in. under the surface. It can be used on parts of any conceivable shape to mark faulty welds, cracks at rivets, fatigue cracks or most any kind of metal failure. No skill beyond that of an ordinary mechanic is required to get results but experience has taught Mr. Cumming's mechanical staff a great many things about the finer points of avoiding part failures. The amount of time required to test a given part is almost negligible.

The equipment itself consists of an electro magnetizing unit. These can be bought in several sizes depending upon the size of parts to be tested. The units can also be purchased to operate from storage batteries or from ordinary house current. The Surface Transportation Co. did not buy their equipment but made it in their own shop, a course which is open to anyone who knows

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Cut the Cost OF ACCIDENT CLAIMS

The Thorough Accident Investigation Program of a Large Chicago Fleet Accounts for a Double Saving

By Donald M. Goodwillie

Safety Director, The Willet Co., Chicago

"IF your truck should become involved in an accident, no matter how slight it might be, it is your most important job to get the names of all witnesses who saw the accident."

This is the instruction which we are constantly stressing with our 500 truck drivers and 50 bus drivers, for we consider the securing of the names of such witnesses as the essential part of our program for the prevention and settlement of motor vehicle public liability and property damage claims.

To aid our drivers in this task, each one of them is expected to have with him constantly for emergency use, 10 small "witness cards" for getting such names, including also the addresses and the telephone numbers of these witnesses. At the bottom of these cards is this simple explanatory statement: "To the motoring public—your cooperation in giving this driver your name and address will enable us to handle this matter in fairness to all parties concerned."

But to sum up the entire program of our department for the control of company public liability and safety damage claims, the following 12 points are significant:

1. Reduce company accidents through constant safety training of drivers.
2. Instruct and train drivers to secure names of all witnesses for every accident.
3. Demand prompt and full accident reports from drivers.
4. Safety Director will visit scene of all serious accidents.
5. Photographs and measurements usually taken at scene of accident.
6. If personal injury is involved, have claimant examined immediately by a doctor experienced in accident procedure and practice.
7. Get signed claimant's report on the particulars of the accident from the claimant's viewpoint.
8. Get as many signed statements as possible from witnesses.
9. When needed, get appraisal of the accident property

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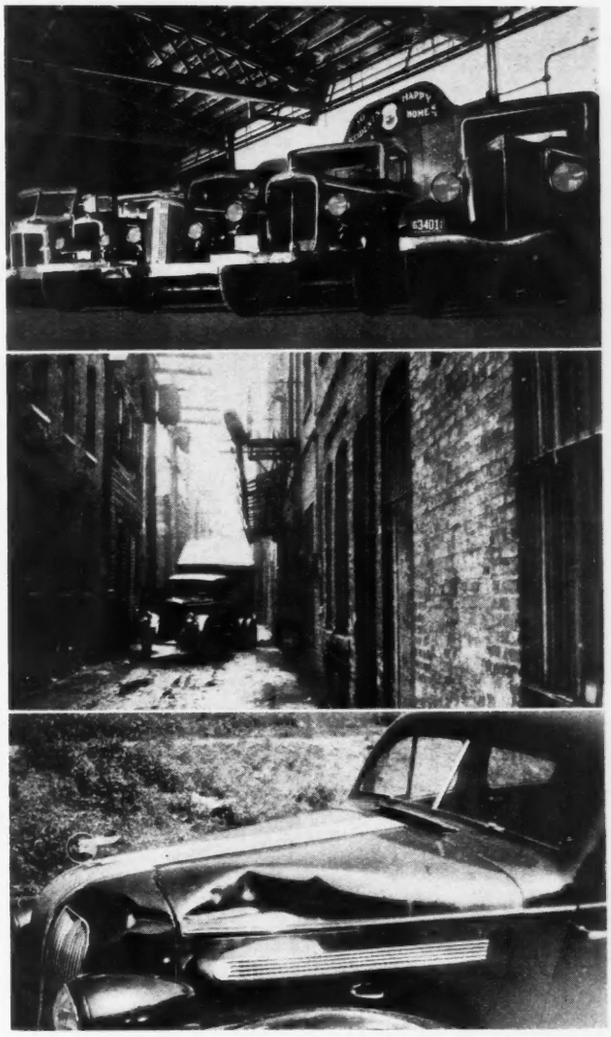
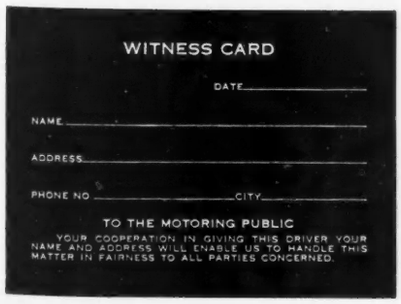
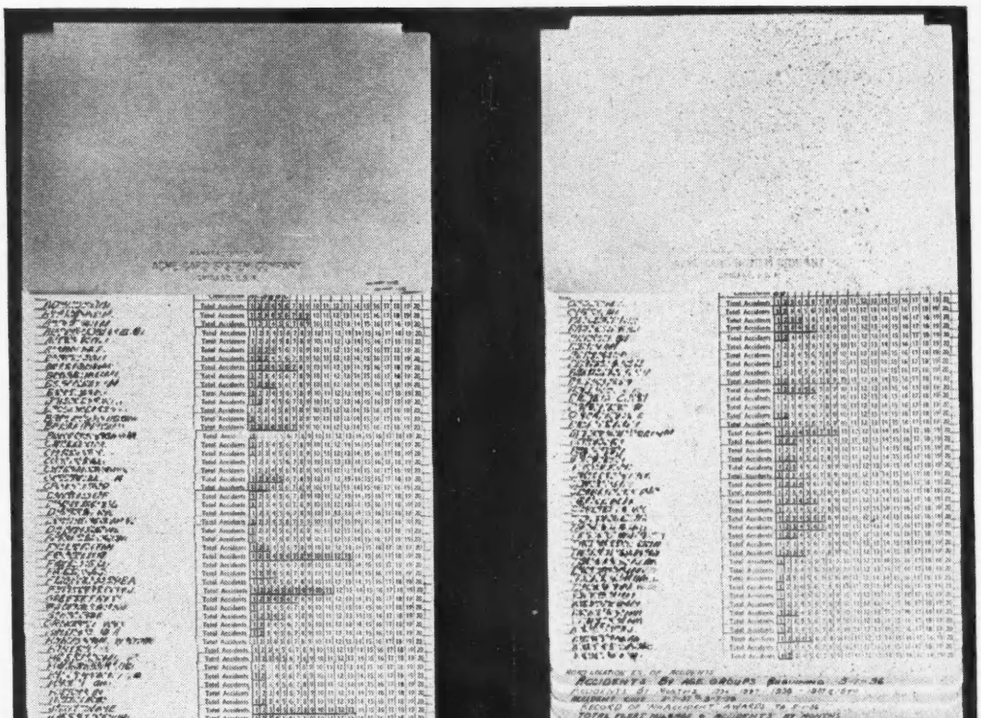


Top: The 44-point inspection in the Willet shop leaves nothing to chance, but when a driver misjudges his clearance on a fire escape, center, the results are inevitable. A tail gate left hanging and careless driving combined against the passenger car hood just above. At lower left, the witness card that helps Willet drivers get their men.


WITNESS CARD
DATE
NAME
ADDRESS
PHONE NO
CITY
TO THE MOTORING PUBLIC
YOUR COOPERATION IN GIVING THIS DRIVER YOUR NAME AND ADDRESS WILL ENABLE US TO HANDLE THIS MATTER IN FAIRNESS TO ALL PARTIES CONCERNED.

WASHINGTON STAR'S SIMPLE ACCIDENT EXPERIENCES AT A GLANCE AND POINTS AN ACCUS-



YOU'RE FIRED

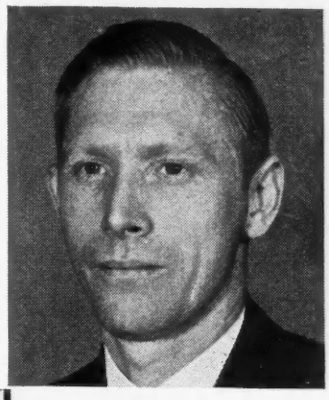
By H. S. Cole

Assistant Superintendent, The Evening Star, Washington, D. C.

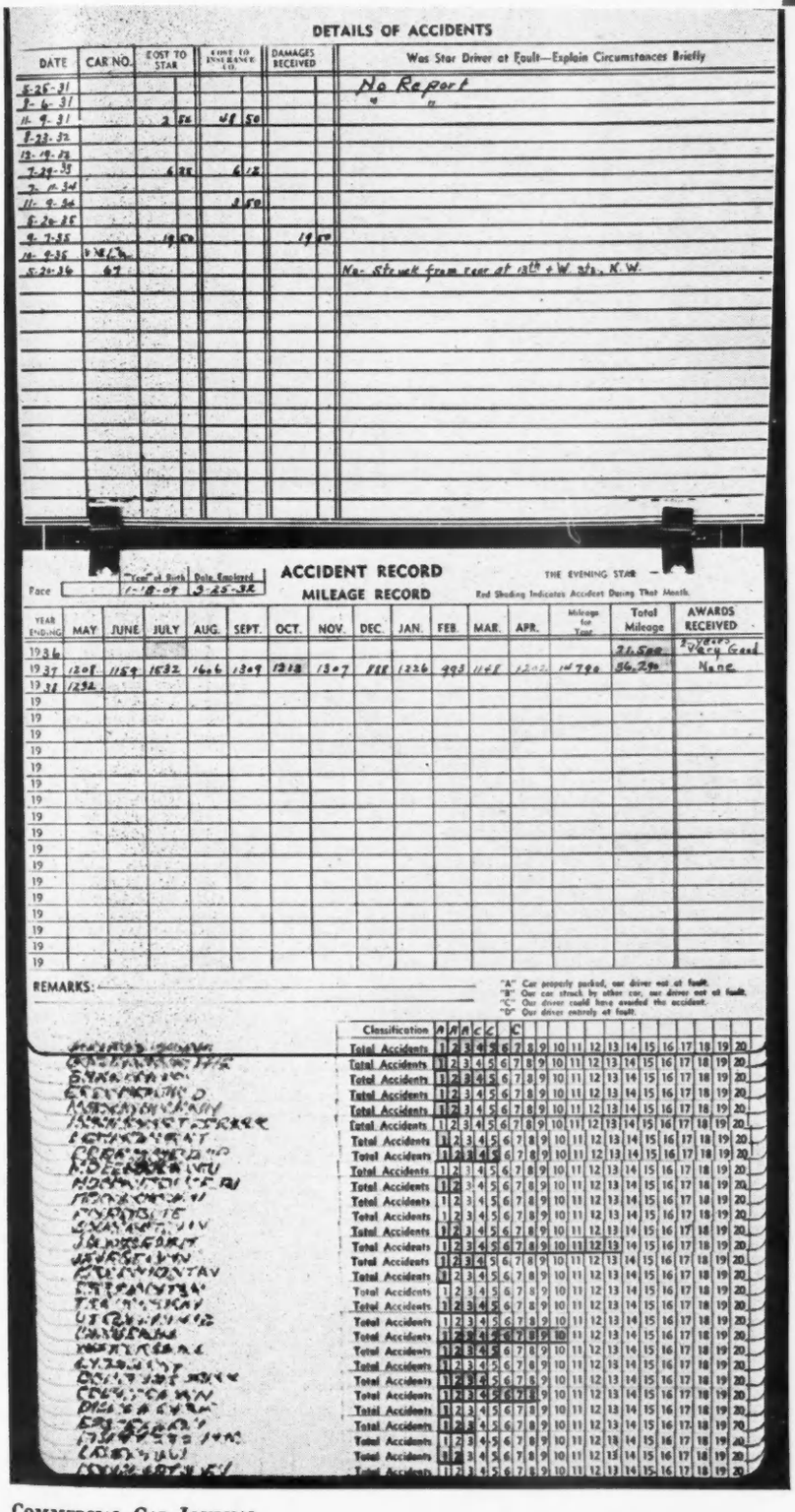
WHEN a driver is involved in an accident and the immediate problems of the accident are cleared away, including the accident report, the next question is "What is that driver's accident record?" Is he improving through less frequency and severity and showing the benefit of the company's training, in spite of the recent accident? Or is he remaining in an accident prone class that needs special instruction? Or has his record reached the point where he is considered a menace to himself and others and needs to be relieved of his responsibility as a driver, in other words, "fired"?

The only fair answer lies in the man's own safety record. How many accidents has he had and to what extent has he been at fault? Heretofore the only way we had of finding the answer was to dig through insurance records, filed by days, months and years, and compile his record. It was a long and not too accurate process and one that encouraged delayed investigation. Often the pressure of other work prevented digging through the files to find out what it was all about, unless

RECORD GIVES DRIVER'S ACCIDENT ING FINGER AT ILL-STARRED REPEATERS



Above, H. S. Cole, the author and originator of the accident record plan. At left may be seen details of the cards, and on the opposite page the complete file system.



DETAILS OF ACCIDENTS

DATE	CAR NO.	COST TO STAR	COST TO INSURANCE CO.	DAMAGES RECEIVED	Was Star Driver at Fault—Explain Circumstances Briefly
5-25-31					No Report
9-6-31					" "
11-9-31		2 25	41 50		
8-23-32					
12-19-32					
7-29-35		6 25	6 12		
7-11-36					
11-9-36			2 50		
8-26-35					
9-7-35		19 50		19 50	
10-9-35	1 Ton Dump				
5-20-36	67				No Strick from rear at 13th & W sts. K.W.

ACCIDENT RECORD
MILEAGE RECORD

Face | "Con" at Birth: 1-18-09 | Date Employed: 5-25-31 | THE EVENING STAR

Red Shading Indicates Accident During That Month.

YEAR ENDING	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MAR.	APR.	Mileage for Year	Total Mileage	AWARDS RECEIVED
1936														21,500	2 years Very Good
1937	1209	1159	1532	1606	1309	1318	1307	888	1226	993	1168	1200	14790	36,290	None
1938	1252														
19															
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REMARKS:

"A" Car properly packed, car driver not at fault.
"B" Our car struck by other car, our driver not at fault.
"C" Our driver could have avoided the accident.
"D" Our driver entirely at fault.

Classification	A	A	C	C	C
Total Accidents	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20				

Commercial Car Journal
October, 1937

some particular driver was suspected of having too many accidents. And after all, every driver should be treated alike.

WE determined that something had to be done about it, that somehow every man's complete record must be available at a glance, for only in such manner could we reach a fair and prompt decision when the question of additional training or dismissal came up.

It was somewhat of a task to compile our present record, for we made it retroactive to include every man's case history from the time he began working for the company. But since last October, when it went into effect, it has saved countless time in searching for records, has been virtually no trouble to maintain and tells us at a glance all we need to know, not only about the individual but about the fleet's driving record as a whole. Here's how it works:

Each of the 106 drivers has a card, so mounted in the filing system that only the name tab shows, and arranged in alphabetically order. After each man's name are a series of numbers representing potential accidents. When an accident occurs a number is blocked out in red crayon opposite the driver's name.

Thus with all cards locked in the file, the effect is a vertical list of names, each followed with a red bar indicating the number of accidents that man has had, or, of course, no bar at all.

Now, when an accident occurs, it is only necessary to put a thumb on the card bearing the driver's name and lift it up. There in a nut-shell is his complete case history. You know at once his age, date of employment, color, his driving mileage by months and the date of his accidents. Most important of all, you know what kind of

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CAPITOL IN BUSINESS

By L. W. MOFFET & JAMES G. ELLIS
Washington Editors

THIS MONTH: **Bureau of Public Roads' special report to Congress discusses sizes and weights, truck speeds and hours of service . . . . Review of exceptions taken to I.C.C. Examiner's hours of service report and A.T.A.'s answer . . . . Congressional activity in the matter of toll roads:**

LACK of uniformity in state laws covering weight and size of vehicles has been cited by the Bureau of Public Roads as responsible for complicating both the engineering and sales policies of commercial vehicle manufacturers.

In its special report to Congress on highway safety and traffic conditions, the Bureau said that the large manufacturers, making sales in every state, are required to meet demands for trucks as heavy and as large as the various state regulations permit. Such "generous" state laws, according to the report, encourage the construction of vehicles which "may properly be considered as unsafe" because of their size and weight.

In the matter of weight, however, the Bureau pointed out that the grossly overloaded "light" truck is a more "serious safety problem" than is the properly loaded heavy-duty truck even though the total weight of the latter is greater.

"Observations made by the Bureau and by all state highway departments," the road bureau reported to Congress, "indicate that though there is only occasional infraction of the maximum weight regulations, there is a prevalent operation of both trucks and tractor-trailer combinations, the gross loads of which may be excessive in respect to the power plant, brakes, and perhaps other elements in the design of the vehicles."

In connection with size, the Bureau characterized the length of vehicles as "the most serious safety question," adding that the laws of a number of states are "unduly generous in the limitation of length of vehicle combinations. In states where length is not regulated, an especially objectionable usage, now happily becoming rarer in response to widespread public criticism, is found in the trailers designed for transportation of automobiles," the report said.

Pointing out that freight vehicles built with power for a "definite maximum load" are being used to transport loads greatly exceeding the designed limits, the report recommended "a better adaptation" of the engine's power to the loaded weights.

The report also assailed the practice of converting trucks without essential change into tractors for towing trailers and semi-trailers. In this way, it was explained, traction demands are imposed on the trucks which are "far in excess of the ability of the motors to stand."

The crawling speeds of such excessively loaded vehicles and combinations on even moderate grades are often "the provoking cause of hazardous attempts to pass," the report added.

TOUCHING briefly on the relationship between hours of service for truck drivers and the safety factor, the Bureau cited limitations imposed by various states covering maximum hours regulations for certain classes of commercial vehicles. It said that the maximum period that any person may drive such vehicles with rest varies from seven to 14 hours in 34 states. When driving is not continuous, the maximum hours of duty during certain specific periods, none of which exceeds 24 hours, varies from eight to 16 hours in 41 states. Regulations covering minimum rest periods for drivers before starting on duty vary from six to 12 hours in 34 states, the report showed.

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WILL BROKERS CONTROL FREIGHT HAULAGE?

ICC Decisions in Acme Case Prompt Speculation on Future Status of Brokers Who May Control Business to Such an Extent That Carriers Are Mere Adjuncts in the Transportation Picture

By Hall Johnston

HALL JOHNSTON, the author, was an ICC Senior Attorney-Examiner and is now engaged in private practice, specializing in motor carrier cases, with offices in the Transportation Building, Washington, D. C.

IT is not surprising that motor carrier executives find it difficult to keep pace with the application of the Motor Carrier Law and the requirements of the Interstate Commerce Commission governing the many phases of motor carrier operation and management. One may study the law to the point of being able to repeat it word for word and still remain in a maze of uncertainty as to its meaning. This is because the law, in the long run, means what the Commission and the courts say it means. One may examine Commission regulations and apply them with meticulous care and still fall into grievous errors. This is because the regulations, too, mean what the Commission says they mean.

That neither the Commission nor the court has issued a final word on these matters is shown by the confusion which is bringing more and more controversies before the Commission and its examiners for determination. That even the decisions now being ground out by the huge Commission judicial mill may not furnish the final word is indicated in the dissenting opinions which dot the decisions, indicating that there is not complete agreement either within or without the Commission as to what the law and the regulations really mean.

However, the Motor Carrier executive must look to the present decisions rather than to a memorizing of the law and regulations for guidance during this formative period of motor carrier operation and regulation. Not only will the decisions constitute the law and the gospel for present-day motor carrier operation, but they will furnish the trend and background for the more permanent setup which must eventually govern the industry.

One of the interesting phases of regulation now in the making and which may profoundly affect the present and future of the industry, is the status which freight and passenger brokers may assume, with the attendant possibilities of broker control of very large volumes of business, which, if carried to an ultimate conclusion, may make the motor carrier more or less an adjunct to the broker who solicits and controls the business.

Interesting in this regard is the application of the Acme Fast Freight, Inc., and affiliates (No. MC 2200) for a single certificate to operate as a common carrier. Although the Acme company handles a very large traffic by its own motor vehicles within the metropolitan area of New York City, and its affiliates own and operate trucks between New York and New England points, the fact that the largest volume of business was conducted by other affiliates handling consolidated

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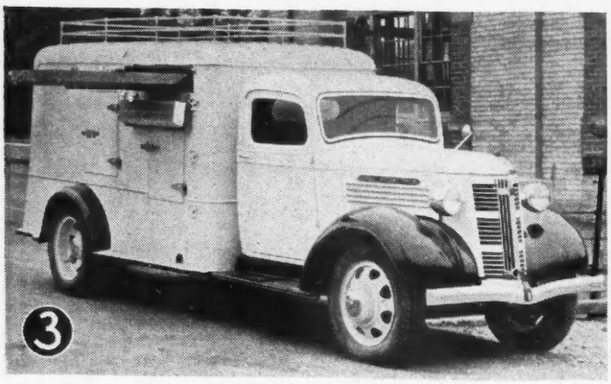
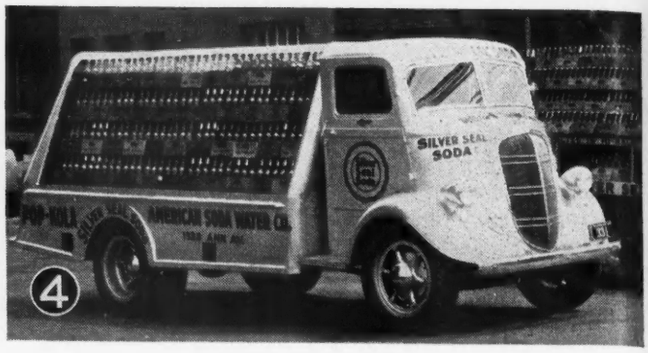
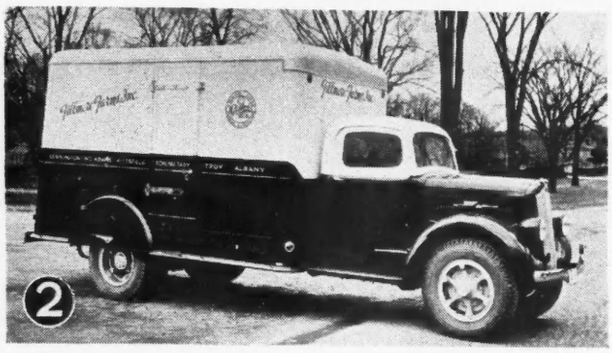
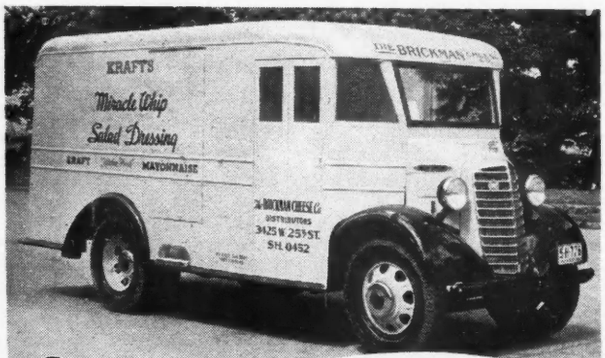








1. BIG cheeses, little cheeses, hot or cold, ride alike in a double-compartment MACK JR. owned by Brickman Cheese Co., Cleveland. The front section handles packaged products on various shelves, while the rear compartment houses a four-door refrigerator and provides additional space for advertising placards.

2. HAULING 2 to 3 tons of milk on a 13-hour run from Bennington, Vt., to Albany, N. Y., this WHITE-powered refrigerated unit keeps its load between 35 and 38 deg. ANDREW J. RONAN of Albany built the body, lined it with DRY-ZERO Sealpad and installed three KOLD-HOLD units operating in conjunction with a KELVINATOR compressor.

3. WISCONSIN seems to have its own idea of what's cold. So when Teck Ice Cream Co. of Middleton ordered a refrigerated body from STOUGHTON CAB AND BODY CO., Stoughton, Wis., they thought nothing of 5 deg. below. The DRY-ZERO insulation is 6 in. thick. But the real trick comes at defrosting time, for the hold-over unit is mounted on rollers, comes out a special door in the side, and can be defrosted in 10 minutes with a hot water spray. Temperature loss during the process is so little, the whole thing can be done with full load aboard. RICHARD A. ROTT of Madison, Wis., developed the defrosting system and holds a patent on it.

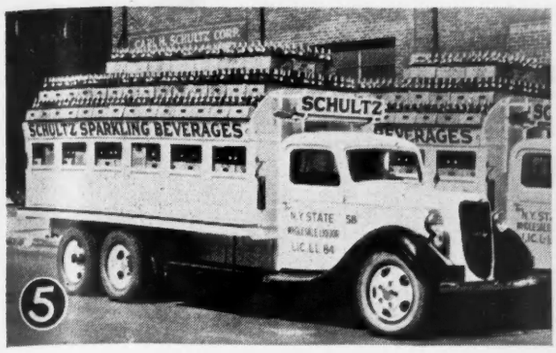
4. QUENCHING moderate St. Louis thirsts is the business of American Soda Water Co. of that city. And toting 146 cases of 24 oz. bottles economically about the city is the business of its STUDEBAKER cab-forward truck. Its special 11-foot body was built by SOUTHWEST AUTO & VEHICLE CO. also of St. Louis.

5. IT'S Yukon Club ginger ale out on top, but it's your guess as to what's inside Carl H. Schultz Corp.'s, completely equipped FORD, Brooklyn, N. Y. Complete? Well, it has a TRUCKTOR third axle aft, a RUCKSTELL 2-speed job ahead and double line B-K booster brakes. Wheelbase was lengthened a foot and the frame is fish plated. ERIKSEN, INC., Brooklyn, built the body.

6. AS far as we could find out there was no warning about this one. It just happened and now floats about the streets of metropolitan New York bobbing head and tail and giving lusty "moos" all at the whim of the driver. Meanwhile the Borden Co., you'd never guess it, reports much public interest and increased sales both to retailers and consumers. It must have a man-sized powerplant aboard for the whole thing's flood-lighted, and those show cases on the side, even the cans on top, are lighted from within. Down at

THE ALBUM

OF MODERN TRUCK TRANSPORTATION EQUIPMENT



the bottom of it all is a brand-new D-300 INTERNATIONAL. JENTER of Mount Vernon, N. Y., built the display.

7. YOU'VE got to admit there's style in these cream-white DIAMOND-T "pick-ups." They're ¾-ton model 80's and whisk the products of this modern dairy about the streets of Milwaukee. Big Elm sees to it that they're kept almost as clean as the milk they carry.

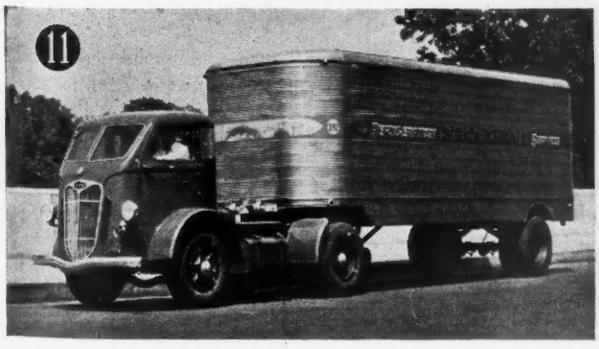
8. LITTLE trace of the old feed wagon that jolted down Main Street is left in this modern grain hauler produced for a Janesville, Wis., firm by DODGE and HIGHWAY. When you want feed—you open a chute and that's about all there is to it.

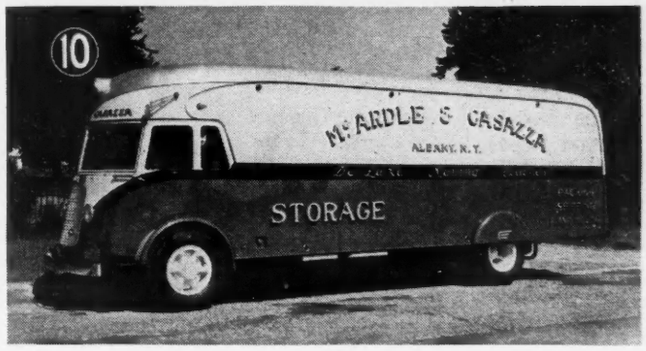
9. HERE'S another one of those suit-any-taste-you-mention combination jobs. The body was made for Red River Produce Co., Grand Forks, N. D., by SMITH COMMERCIAL BODY WORKS of Fargo, and carries 420 gal. of ice cream and comparable amounts of both draught and bottled beer, each at its proper temperature. The middle ice cream section, surrounded by 6 in. of DRY-ZERO, is maintained at zero. Three KOLD-HOLD units and a YORK compressor supply the cold. The trailer frame is by TRAILMOBILE and the tractor's a Model D-40 International.

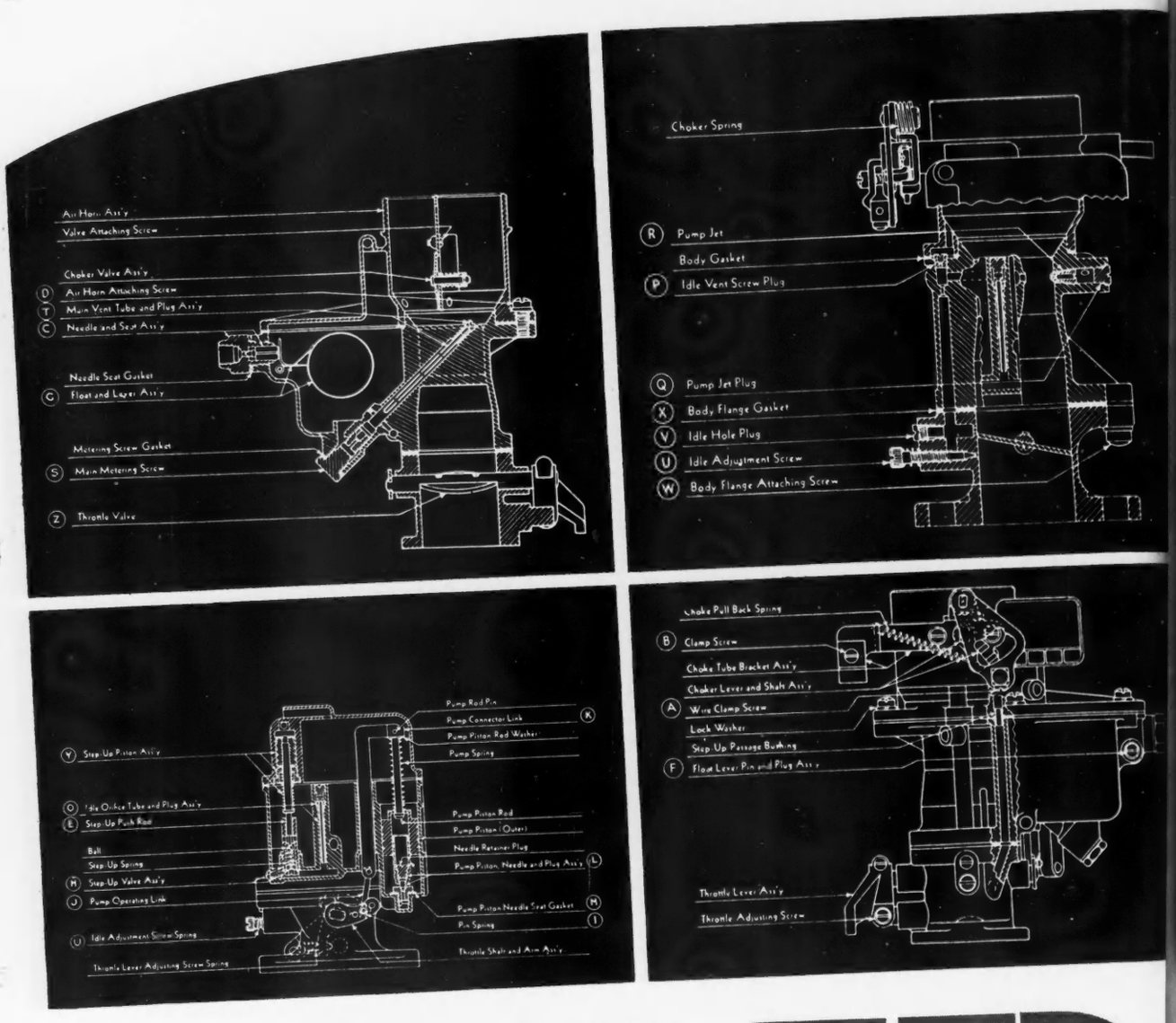
10. WHEN you put the cab forward and still have a 220 in. wheelbase it's a big truck, and when the body's 25 ft. 2 in. long from the back of the driver's seat, you can haul a lot of furniture, and when it's as good looking as this one, you've really got something. It's a MACK model CJ chassis. The special headlight above the windshield is a ditch light operated from within the cab.

11. An insulating floor of blown glass is the most unusual feature of this stainless-steel refrigerated body built by the EDW. G. BUDD MFG. CO. for Davidson's Transfer Co., Baltimore, Md. Kapok side and roof insulation is used and cooling is by solid carbon dioxide. FRUEHAUF built the trailer chassis, and tractor is a 3UTR AUTOCAR.

12. GOODYEAR-WENDE Oil Corp., large-scale Texaco marketers, did a good deal of experimenting before this job was picked as the favorite son. An INTERNATIONAL chassis, TRUXMORE third axle and a tank made by PENNSYLVANIA FURNACE & IRON CO. are the principal components.







SERVICING CARTER

CARBURETOR Series—4

CARBURETORS in the group appearing by specific numbers in the accompanying application list are all known as Carter Model BB downdraft carburetors. The instructions given below are of a general nature aplying to the entire group. Special settings and instructions may be found on the specification sheet for your particular carburetor.

Manifold studs and gaskets must be tight before attempting to adjust the carburetor. Likewise it is always well to check compression and vacuum.

Having obtained a clean pan for parts, the following steps should be followed to disassemble the carburetor:

1. Remove air cleaner and disconnect choke tube and wire by loosening screws (A) and (B). Disconnect automatic choke if so equipped.

2. Disconnect throttle rod and gas line. Hold fitting in needle seat while unscrewing fitting on gas line.

3. Remove flange nuts. Take care not to drop washers into manifold.

4. Remove air horn attaching screws (D) and lift off body gasket.

5. Remove step-up push rod (E).

6. Drain carburetor.

7. Remove float and lever pin and plug assembly (F) and float and lever assembly (G).

Carter Numbers and Application List—Group 2

Carburetor Number	Make and Model of Vehicle	Float Level (In.)	Idle Adjustment (Turns open)
E8A	Dodge DO (1933)	1/16	5/8 to 1-1/4
C6A2, CTA, CTB, ETB	Dodge Truck: HC-HCL, G30-31, H30-31, H43-44 (Early 1933)	1/16	1/2 to 1-1/4
C6A3, C6A4, CTA4, CTB4, ETB4	Dodge Truck: HC-HCL, G30-31, H30-31, H43-44 (Late 1933)	1/16	1/2 to 1-1/4
CTC1, CTD1, ETD1	Dodge Truck: K20, K20X, K21, K21X, K30, K31, K32, K33, K34, K22, K35, K36, K37, K45, K46, K47, KC, KCL (1934)	5/64	1/2 to 1-1/4*
B6E1, CTD2, ETF2	Dodge Truck: KC, KCL, K19, K22, K32, K33, K34, K45, K46, K47, K48, KH16, KH17, KH18, KH21, KH22, KH23, KH31, KH32, KH33 (1935)	5/64	1/4 to 1 †
CTF1, ETG1	Dodge Truck: LC, LE30, LE31, LE32, LF35, ‡F36, LF37, LH45, LH46, LH47, LH48 (1936)	5/64	1/8 to 3/4 ‡
CTH1, CTH2, CTJ1, ETJ1, ETJ2, ETL1	Dodge Truck: MC, MD20, MD21, ME15, ME16, ME17, ME20, ME21, ME22, ME30, ME31, ME32, MF30, MF31, MF32, MH40, MH41, MH42, MH43, MG40, MG41, MG42, MG43 (1937)	5/54	1/4 to 1
6CA, 6CA2, 6CA3, 6CA4	Plymouth PC, PD (1933)	1/16	1/2 to 1-1/4
C6B1	Plymouth PE, PG, PF, PFX (1934)	5/64	1/2 to 1-1/4
B6A1, B6A2, B6C1, B6C2	Plymouth Special (1934)	5/64	1/2 to 1-1/4
C6D1, C6D2	Plymouth PJ (1935)	5/64	1/4 to 1
B6E1, B6E2	Plymouth (Business Coupe) (1935)	5/64	1/4 to 1
C6E1, C6E2	Plymouth P1, P2 (1936)	5/64	1/8 to 3/4
B6F1, B6G1	Plymouth "Fleet" (1936)	5/64	1/4 to 3/4
C6F1, C6F2, C6F3, C6F4, C6F5, C6H1	Plymouth P3, P4 (1937)	1/64	1 to 1-1/2
303S	Reo Truck and Bus: 6A, 650, 675, 1A4, 1A4H, 1A7M, 1B4, 1B7M, 1C4, 1C4H, 1D4, 1L5, 1LC5, 1L5H, 2B7M, 6AP (1935-36-37)	1/64	1/4 to 3/4
304S, 320S	Reo Truck and Bus: 1B4H, 1D4H, 2B4, 2D4, 2H5, 2J5, 2LC4, 2LM7, 2LMH7, 2L4, 2L4H, 3H5, 3HR5, 3J5, 3JR5, 3K5, 3KR5 (1935-36-37)	1/64	1/4 to 3/4
356S, 368S	Reo Truck and Bus: 450, 475, 650, 675, 1A4, 1C4, 1L5, 1A7M (1937)	5/64	1/2 to 1-1/2§
362S	Studebaker Truck: J30, J30M (1937)	5/64	1/2 to 1-1/4

* Except ETD1 3/8 to 1-1/4. † Except CTD2 1/4 to 3/4. ‡ Except ETG1 1/4 to 1. § Except 368S 1 to 2.
Used only where crankcase is ventilated through carburetor.

CARBURETORS

Step by Step Procedure for Overhauling Group 2—BB Downdraft Models. Group 1 Carter Models Were Serviced in the August Issue

8. Remove needle and seat assembly (C). Be careful not to drop.

9. Unscrew and remove step-up valve assembly (H) and any ball checks in bowl of carburetor.

10. Remove pin spring (I) and pump operating link (J).

11. Remove pump rod and piston assembly by pulling upward on pump connector link (K).

Note: Early 1933 models did not have parts mentioned in steps 12 and 13.

12. Remove pump piston, needle and plug assembly (L) by turning carburetor upside down. Avoid dropping.

13. Remove pump piston needle seat and gasket assembly (M). Be careful not to drop steel ball.

14. Remove idle orifice tube assembly (O).

15. Remove idle vent screw plug (P).

16. Remove pump jet plug (Q) and pump jet (R). Use properly fitting screw driver.

17. Remove main metering screw (S).

18. Remove main vent tube and plug assembly (T).

19. Remove idle adjustment screw and spring (U).

20. Remove idle hole plug (V).

21. Remove body flange attaching screw (W) and gasket (X).

22. Remove step-up piston assembly (Y) from upper casting and remove small gasket under piston.

23. Do not remove throttle valve (Z) unless damaged or worn at throttle shaft.

24. Remove small jet (power orifice) from step-up valve assembly (H). Do not lose steel ball or spring inside assembly.

Wash all parts and body casting in gasoline. Blow through all parts and passages with dry air. Make sure all parts are clean and if worn or damaged, replace with new.

TO re-assemble carburetor:

25. Attach throttle body to main body casting using new flange gasket (X). Surface upper casting if warped before replacing to insure tight seal.

26. Replace idle adjustment screw and spring (U) in lower hole in casting.

27. Replace idle hole plug (V) in proper hole.

28. Re-assemble step-up valve assembly (H). Put steel ball in housing first, then spring, then screw in jet (power orifice). Replace assembly in carburetor body.

29. Replace idle orifice tube and plug assembly (O).

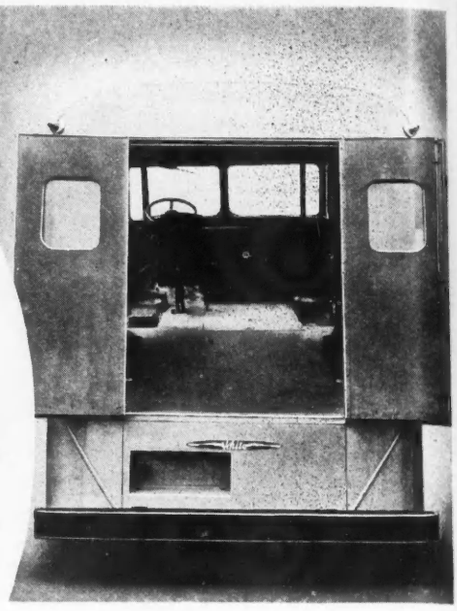
30. Replace idle vent screw plug (P).

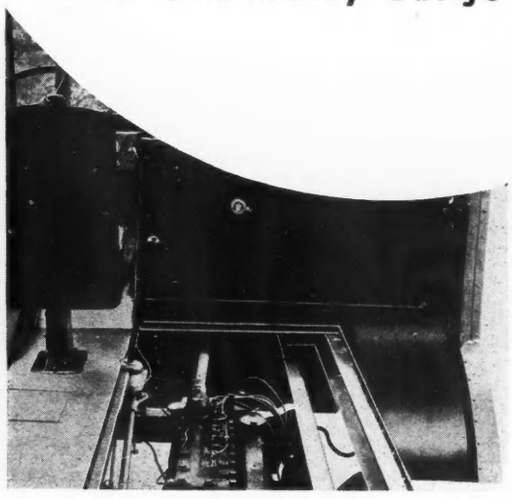
31. Replace main vent tube and plug assembly (T).

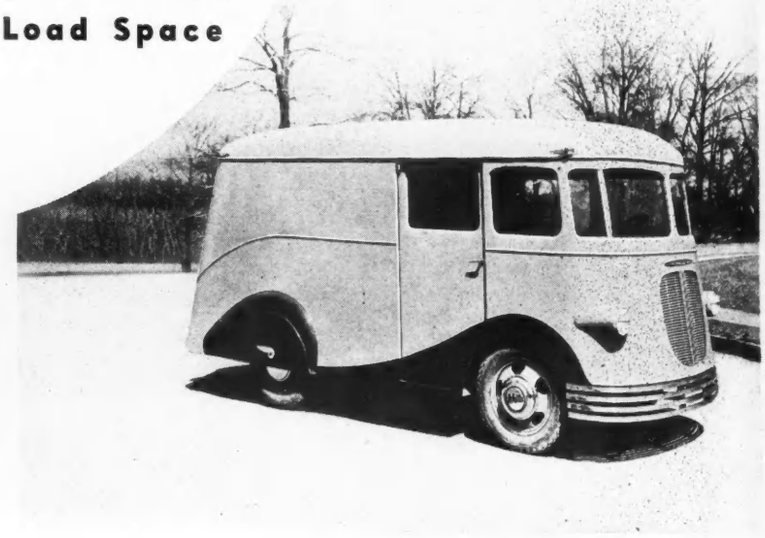
(TURN TO PAGE 48, PLEASE)

WHITE MERCHANDOR

Features Engine Under the Floor And Unusually Large Load Space







The smart exterior lines of the White Merchandor are apparent in the photograph directly above. Note the unusual visibility from the driver's seat. The top view shows the long level floor, and at left, the vertical engine mounting beneath the floor.

WHEELBASE of 102 in., a 205 cu. in. 6-cyl. engine under the floor, easy maneuverability, maximum visibility and 350 cu. ft. of loading space are features of the new streamlined White Model 800 Merchandor introduced this month by the White Motor Co.

The unit has been designed specifically for service in the bakery, laundry, dry cleaning, department store, dairy, florists and other light delivery fields and is rated in the 1-ton class.

The engine, mounted back of the front axle and entirely under the floor, makes possible the short wheelbase and provides a more equal weight distribution. Easy access to the engine for adjustments and repairs is provided through large trap doors. In closed position these fit flush with the level floor and in no way interfere with load space.

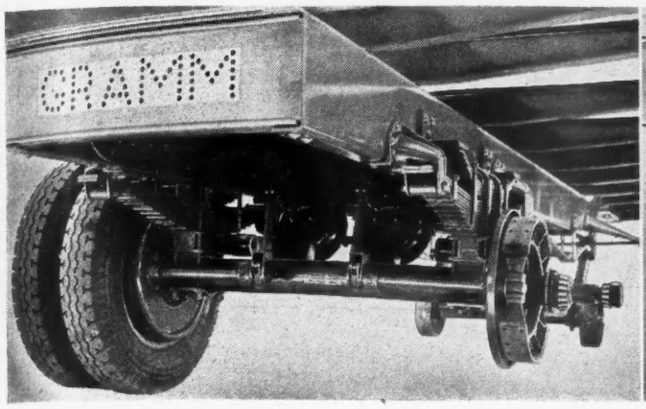
Tocco hardened seven-bearing crankshaft and cadmium-nickel main and connecting rod bearings are used, and company tests have shown gasoline mileage as high as 19 miles per gal. and an idling performance of 3 hrs. and 35 minutes per gal. Using a 5.14 rear axle ratio, the truck has a speed of 40 m.p.h. at 2100 r.p.m.

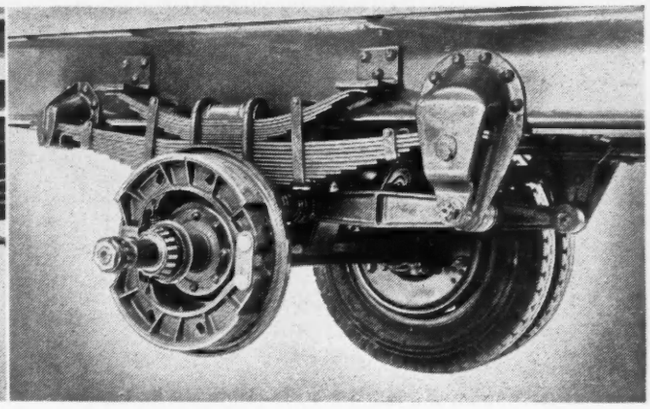
A front axle tread of 63 in., combined with the short wheelbase, makes possible exceptional maneuverability and a turning radius of but 36 ft. The overall length is 17 ft.

An oversize 11-in. single, dry plate clutch of the semi-centrifugal type and oversize four-wheel hydraulic brakes with brake lining area of 264 sq. in. insure low maintenance and satisfactory operation. The generator cuts in at an engine speed of approximately 200 r.p.m., well within the idling range.

The Merchandor body is streamlined and smartly-styled. It has a total capacity of approximately 350 cu. ft. of which 318 cu. ft. are back of the driver's seat. The interior has headroom of 66 in. with a flat level floor interrupted only by low wheelhousings at the rear.

Floor level loaded is 30 in. above the ground divided by two steps 18 in. and 12 in. Large doors provide easy access to the driver's seat located in the very front with uninterrupted view of the road.





NEW GRAMM TRAILERS

Offer Five Semi-Trailer Capacities and a Companion Line of Four Wheel Models. All Have New Features

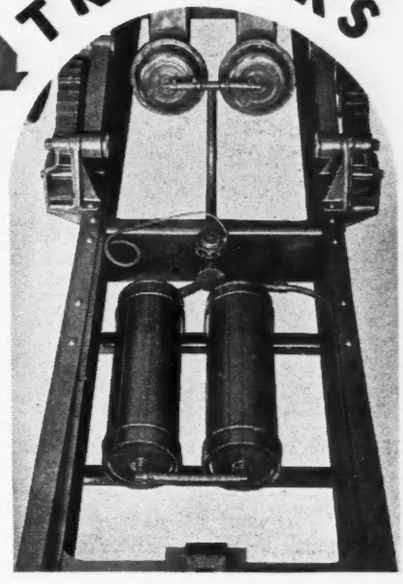
A NEW line of trailers, semi-trailers and pole trailers has been announced by the Gramm Motor Truck Corp., Delphos, Ohio. In the new line of semi-trailers there are two base models with three optional axle sizes for a total of five gross trailer ratings of 18,000, 22,000, 27,000, 32,000 and 42,000 lb. A companion line of four-wheel trailers is provided using a roller mounted fifth wheel and hinged tongue. Stiff-tongued dollies are offered which may be used with the semi-trailer to provide a four-wheel vehicle.

Timken tubular axles are used on the entire line having gross ratings of 11,000, 13,000, 15,600, 18,000, and 25,000 lb. The semi-trailer capacity is figured with 60 per cent of the load on the trailer axle.

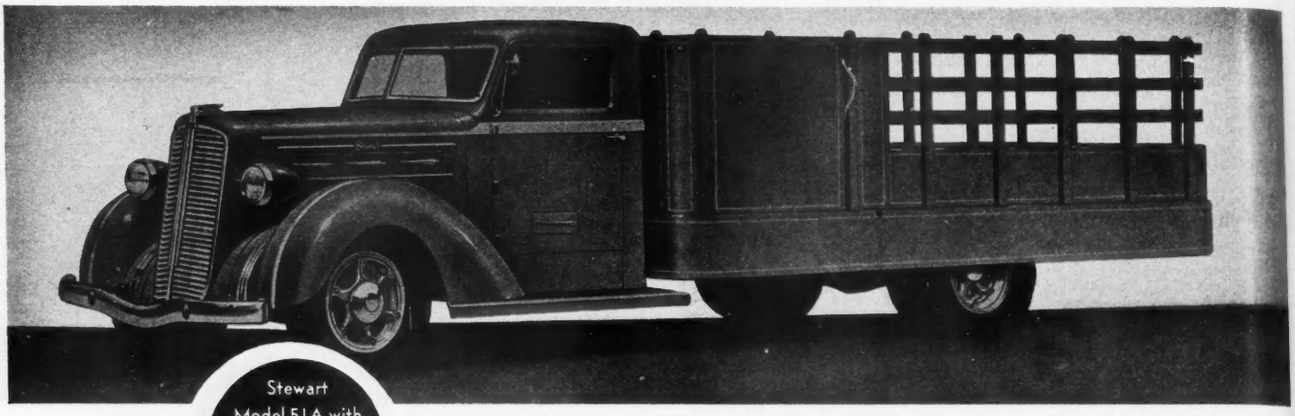
A center section runs the length of the frame side rail to provide for greater rigidity and upon all trailers greater than 18 ft. in length a truss rod is permanently applied with the frame deflected in a position opposite that caused by load. The purpose of this is to counteract destructive sag.

The design of the spring and radius rod assembly is completely new. Each spring end has a sliding contact with a permanent cast alloy insert in the spring hanger casting and the spring ends are held in place by a rubber cushion rebound tube. The spring which is 51 in. long and 3 in. wide is prevented from moving along the axle pad by having all leaves cupped down into the axle pad. Helper springs 30 in. long have a sliding contact at the ends on pressed steel brackets. The third leaf of the main spring ends in a 90 deg. angle and the bent portion of the leaf would go against the rubber rebound tubes in case of radius rod failure so that it is impossible for the spring ends to leave the spring hangers. Radius rods are of cast I beam with rubber bushings at each end.

Brakes are the mechanical two-shoe type manufactured by Timken. They are vacuum actuated and two vacuum tanks and two directly connected diaphragms with slack adjusters built into them are standard equipment in a double line hook-up. The tanks are large enough to provide three or four brake applications with the engine not operating.



Top: Details of the new Gramm line. Note especially the Timken tubular axle, the sliding spring hanger arrangement with third leaf bent short and the new cast I-beam radius rod assembly. Directly above may be seen the twin tank and diaphragm arrangement in the double line brake hook-up.



Stewart Model 51A with De Luxe Stake Body and Closed Cab

New 3-Ton Stewart Has 16,000 Lb. Gross Rating

STEWART MOTOR CORP., Buffalo, has recently announced a new 3-ton chassis weighing 5840 lb. and having a gross capacity of 16,000 lb. It is known as Model 51A.

Especially designed for fast, heavy-duty service, the chassis is powered by a 6-cyl. Continental engine with bore and stroke of 4⅛ in. x 4½ in. developing 85 hp. It has a piston displacement of 361 cu. in. and a seven bearing crankshaft of 2⅝ in. diameter. The maximum torque is 225 ft. lb. at 1000 r.p.m. Engine lubrication is full pressure feed with constant pressure control for all motor speeds. Oil filter is standard and the Stromberg down-

(TURN TO PAGE 48, PLEASE)

The smooth exterior appearance of the Dearborn Line Delivery may be seen in the views above. One of the two outside-folding doors, locked in open position is shown at right.

New Dearborn Line Package Delivery

TRANSPORTATION Engineers, Inc., Detroit, has announced a parcel delivery unit using a brand new Dearborn Line body and the Dearborn Line conversion of the Ford V-8 112-in. chassis.

The body, using pressed steel frames and genuine Plymetl panels has a loading space of 120 in. back of the driver's seat, is 70½ in. wide, has 66 in. headroom, and a total capacity of 334 cu. ft. Weight with the 85 hp. engine is 3390 lb., and 3190 with the 60 hp. model.

Particularly accessible from either side is the driver's seat, which is swiveled and located so that the driver's head is within 30 in. of the windshield, which combined with the short outside hood, gives exceptional visibility. All controls are within normal relative positions, and involve no structural change from the standard chassis. The two-piece outside folding doors, provide a 30-in. opening and conceal the single step.

Both outside and inside hoods are instantly removable giving complete access to all engine parts. The engine itself can be removed through the front. Standard Ford radiator, radiator shell and lights are used.

The unit will be available on the 1938 chassis as soon as these are ready.

THERE'S a reason for the swing to hydraulic brakes. It's because they in turn swing sales to the cars and trucks equipped with them.

Figure it out for yourself . . . if you, as a motorist, had to choose between two cars, only one of which was equipped with Hydraulic Brakes . . . which would be your choice?

The Hydraulic Brake-equipped car, of course!

And every advantage that would lead you to this choice applies *in greater measure* to the trucks you operate. Hydraulic Brakes insure an easy, smooth, *equalized* stop—are sturdy and long lived—require little servicing—and no lubrication. They provide a gentle, easy pedal—reduce the physical strain on the driver.

It is for all of these reasons that public sentiment swings farther and farther to hydraulic braking, so that the list of trucks so equipped now closely approaches 100%.

HYDRAULIC BRAKE COMPANY
DETROIT, MICHIGAN

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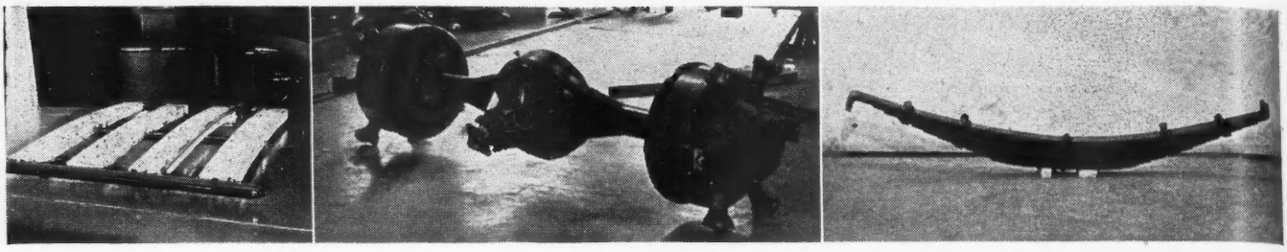


Unique features of United's new truck include, left to right, steam cooling with condensors mounted flat on the roof, oversized rear axle, and shackless springs which slip in and out with the removal of a single bolt.

United Parcel Develops Its Own Package Truck

SEEKING a delivery truck suited to its specific needs, United Parcel Service, which operates in New York City, Cincinnati and on the Pacific coast as contract delivery for department stores, has developed within its own shops a new type of package delivery car. The complete unit weighs but 4800 lb., yet has 332.4 cu. ft. net capacity.

Containing such unique features as steam cooling, a 50-hp. 4-cylinder engine, over-sized, 11-in. clutch, transmission and rear-end and a light weight electrically-welded tubular frame, the first unit has proved so successful that already ten more are under way.

Maximum torque delivered by the 4-cylinder Continental engine is 106 lb. ft. and its bore and stroke are 3⅜ x 4 in. Half the later units will be equipped with 6-cylinder engines of 209 cu. in., for experimental purposes. The two engines will be entirely interchangeable, can be exposed for servicing within one minute and removed from the chassis in five.

Advantages claimed for the steam cooling system include the elimination of radiator fan water pump and thermostat, greater thermal efficiency owing to a constant operating temperature of 212 deg., as well as considerable reduction in sludge and dilution. The condensers are mounted flat on the roof and are almost unnoticeable. Heavy loads or long grades do not change the engine temperature, but merely accentuate the flow of steam through the condensers.

The body is built in two halves, upper and lower, the lower half forming an integral part with the chassis. Both sections are constructed of ⅛-in. angle iron to which are bolted strips of hard wood. There is no need for body dies, for panels are attached directly to the wood strips. The loading floor is but 17 in. above the ground, yet no tunnel is used owing to a split drive shaft with bearing in the middle. An unusual body feature is a small door in the upper rear panel which gives direct access to two shelves used for hauling rugs—always a critical problem in package delivery.

The complete unit showing simplified exterior lines made possible by cab-over-engine construction. Note the large door for easy access to driver's seat and load space.

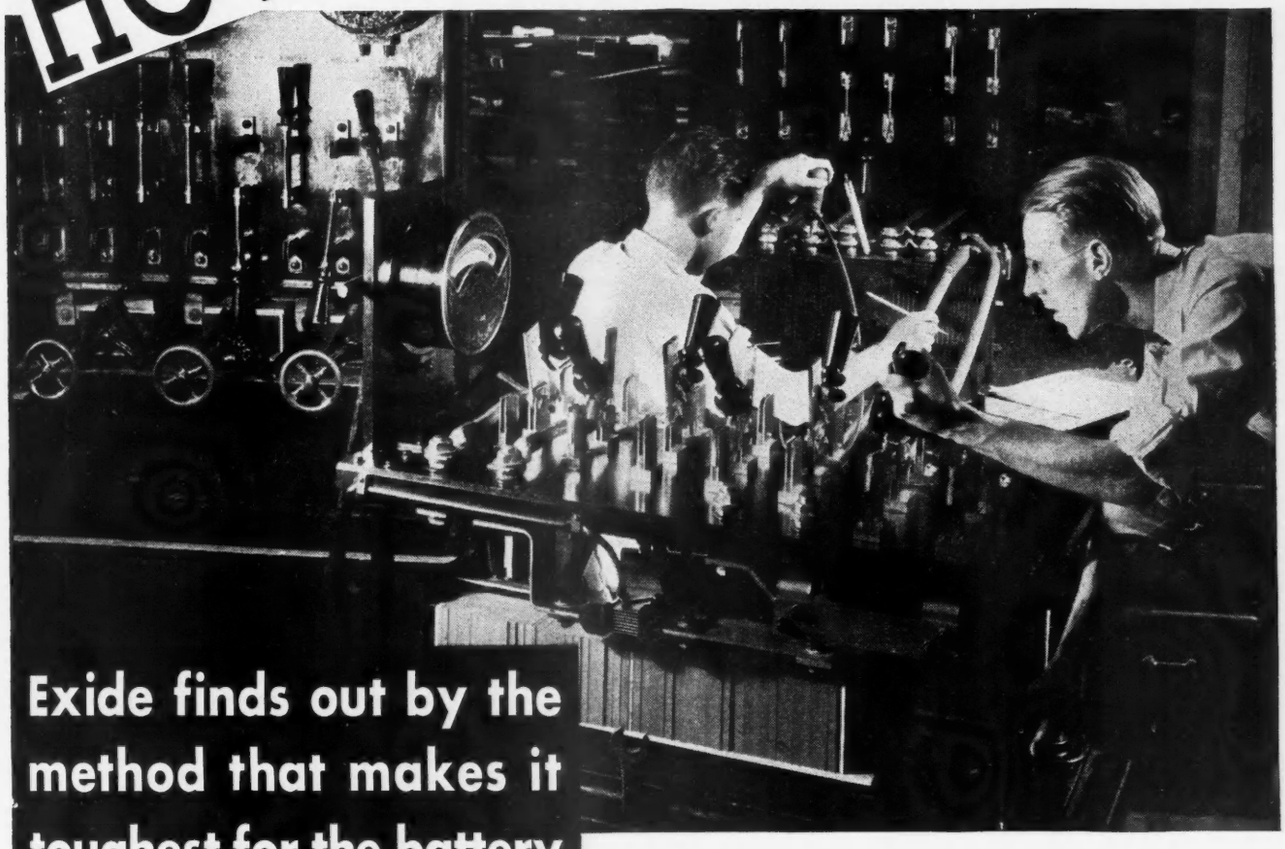
A T-9 Warner 4-speed transmission, Clark front and rear axles, Delco-Remy ignition and Linderman brakes are used. The 1-in. clutch, transmission and brakes are all of a size normally found on a 5-ton truck. Springs have been designed by the company without shackles and are manufactured by the Detroit Spring Co. One end of the main spring leaf is turned up, the other down, in such a way that the spring slips in and out with the removal of a single bolt.

New Truck Registrations by Makes by Months

July and 7 months totals do not include Wisconsin

	Autocar	Brockway	Chevrolet	Diamond T	Dodge	Federal	Ford	G.M.C.	International	Mack	Reo	Sterling	Stewart	Studebaker	White-Indiana	Miscellaneous	Total
January.....1937	130	102	14,362	863	3,764	207	16,544	2,820	6,244	389	354	29	92	169	592	948	47,609
January.....1936	75	94	15,124	495	6,207	223	14,606	428	4,743	90	339	8	85	143	493	607	43,760
February.....1937	112	115	7,939	602	5,043	206	16,460	3,051	5,256	364	317	26	101	222	550	1,451	41,915
February.....1936	57	88	14,978	510	5,556	170	12,226	758	4,365	107	217	4	62	134	408	661	40,301
March.....1937	179	140	17,164	849	6,498	241	20,839	4,201	5,820	480	495	23	149	478	655	2,080	60,291
March.....1936	88	127	19,511	634	6,751	205	16,168	1,551	5,395	184	264	17	73	221	477	762	52,428
April.....1937	228	184	22,707	916	4,090	258	22,897	4,815	6,894	594	394	47	121	725	819	2,193	67,882
April.....1936	121	179	23,323	784	8,817	271	18,493	2,733	7,308	289	379	21	112	327	700	1,099	64,956
May.....1937	198	183	20,772	867	6,045	301	20,452	4,536	7,279	588	424	28	120	720	795	2,549	65,857
May.....1936	109	168	21,443	754	8,507	275	17,971	3,045	6,704	440	399	16	116	358	719	1,159	62,183
June.....1937	199	139	17,177	685	6,191	226	17,760	4,146	6,925	540	454	33	94	651	678	2,726	58,626
June.....1936	96	137	19,045	660	7,777	287	16,930	2,820	6,151	427	325	28	113	320	599	1,136	56,851
July.....1937	281	152	17,011	719	6,333	219	18,262	4,088	7,381	607	445	34	104	587	621	2,607	59,451
July.....1936	137	207	20,769	786	7,855	268	18,012	3,363	6,928	483	366	22	131	350	729	1,029	61,435
7 Months.....1937	1,327	1,015	117,132	5,501	37,964	1,658	133,214	27,657	45,799	3,562	2,883	220	781	3,552	4,710	14,556	401,531
7 Months.....1936	683	1,000	134,193	4,623	51,470	1,699	114,406	14,698	41,594	2,020	2,289	116	692	1,853	4,125	6,453	381,914
% Change 7 Mo's...	+94	+2	−13	+19	−26	−2	+16	+88	+10	+76	+26	+89	+13	+92	+14	+126	+5

HOW LONG can an Exide Battery crank an engine at Arctic temperatures?



Exide finds out by the method that makes it toughest for the battery

FREEZE an engine down to zero temperature. Chill a battery to the same point. Then make the battery crank the engine. That's easy compared to the test that Exide uses. For in actually cranking the engine the hardest part is the "breakaway"—that point when the engine first begins to budge.

What Exide does in testing a battery for use in fleet service is to throw a constant load on it equal to that of the "breakaway" — then see how long the battery can keep on delivering such a tremendous flow of power. And this is done with the battery held at 0°F.

It is a matter of pride with us that Exide Batteries exceed the rigid requirements of the Society of Automotive Engineers for this extreme test. That is one of the many reasons why you can depend on Exide for outstanding performance and lower battery maintenance costs. The Exide line is complete, with Commercial Type Exides that take care of 90% of all commercial vehicles, and the Exide heavy-duty line for large trucks. Why not standardize on Exide and cut costs?

THE ELECTRIC STORAGE BATTERY CO., Philadelphia
The World's Largest Manufacturers of Storage Batteries for Every Purpose
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NEW PRODUCTS ON PARADE

Casco Defrosters

CASCO Products Corp., Bridgeport, Conn., has added an entirely new rubber-bladed fan to its line of defrosting equipment. Operating on extremely low current draw, the fan's flexible blades give a large volume of air for all-year-'round use. A two-speed switch is provided. Improvements have also been made in the standard Casco electric defrosters and in the heater switches.

Hoof Governors contribute to Safety Record

The combination of safe driving and Hoof Cantilever Spring Governors has established a nation-wide safety reputation for the Decatur Cartage Company, Chicago. The greater portion of this company's fleet of 100 units is equipped with Hoof Governors.

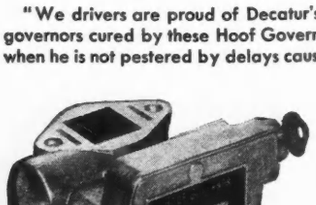
Safety Director R. M. Pride, of Decatur Cartage, says that the use of governors is a contributing factor in his company's safety record and that since Hoof Governors have been adopted driver resistance to governors has been greatly reduced.

In regards to the drivers' acceptance of Hoof Governors, Mr. Pride cites the case of Al Linstrom, veteran Decatur driver, who has a remarkable record to his credit. Linstrom has driven more than 200,000 miles in the past five years without an accident of any kind and was recently given a National Safety Council Award.

Driver Linstrom says:

"We drivers are proud of Decatur's safety record. I, for one, have had my dislike for governors cured by these Hoof Governors. A driver has no reason to object to governors when he is not pestered by delays caused by loss of power and the need of adjustment and service on the road.

"You would hardly know there was a governor on the truck. They pull the hills with all the power of the engine, giving us extra safety, and permit full acceleration, without bothering us in our job of getting shipments from here to there right on schedule."



S-20H Key Type for 1¼" Carburetors.

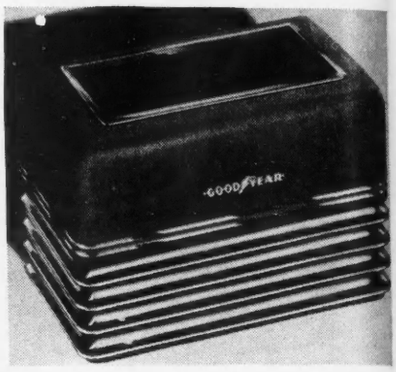
There is a Hoof Cantilever Spring Governor to meet every truck and car requirement . . . Key Type, Seal Type and Dash Control Type

Write to us for 64-page Hoof Governor Manual or take up with your nearest jobber

HOOF PRODUCTS COMPANY
162 NO. FRANKLIN STREET *Cantilever Governors* CHICAGO ILLINOIS

Goodyear Heater Line

GOODYEAR Tire & Rubber Co., Akron, Ohio, has announced a new line of automobile heaters for 1938. Defrosters on the "Double Eagle" and "All-Weather" models can force 1000 cu. ft. of heated air per min. to the windshield with no extra motor blower necessary. There are separate foot warmers for both driver and passenger, and a new method of heat distribution eliminates undue blasts of hot air.



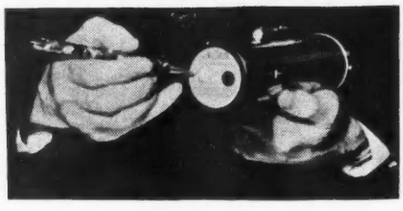
Shock Linkage

NEW Shock Absorber Link Assembly which exactly duplicates the original part for Ford, No. 48-18055A, is announced by The L. F. Kreger Mfg. Co., 550 West 35th St., Chicago.

This new Kreger item, No. 211, sells at 40 cents. For all 1935-36-37 Fords, these link assemblies will give exceptionally satisfactory service because of their careful construction and workmanship. Kreger No. 210 Ball Stud for this assembly is also available separately.

G. E. Decelometer

GENERAL Electric Co., Schenectady, N. Y., has announced the development of a decelometer which flashes either a green or red signal depending upon whether or not brakes are within legal stopping limits. An inertia-operated mercury switch inside the device closes electric contact with the proper light. The device is said to be extremely accurate and to eliminate conscious and subconscious "cheating" from brake tests.



Double-Action Fan

SIGNAL Mfg. Co., Lynn, Mass., has announced an adjustable double-action defrosting and ventilating fan which features two rubberbladed fan heads mounted on a single motor. The fan can be adjusted so that the air current may be directed to the entire windshield at the same time. A rigid metal base keeps the fan free from vibration at all speeds. Also available in single fan models.

(Turn To Page 40 Please)

"What do you mean, *I can save money by spending it!*"

HIGHER INITIAL COST in itself doesn't make a motor oil better.

But, when a small initial premium buys the unbeatable lubrication that Gulfpride gives to fleet operators—then it may be actual *extravagance* to pay *less* for an oil.

We say this because, when Gulfpride goes into a fleet's crankcases, instance after instance proves that two definite savings begin to show up on the books:

1. *Total oil bills drop.*
2. *Maintenance and repair expense is drastically reduced.*

Why is it that Gulfpride can make these savings? It's because Gulf's Alchlor process does the world's most thorough refining job . . . removes virtually *every last particle* of the non-lubricating wastes that exist in even the finest 100% Pennsylvania crude base.

And as a result, Gulfpride is so tough that it gives maximum lubricating protection . . . so pure that oxidation, carbon, gum and sludge (which cause excessive wear) are kept at a minimum.

In short, Gulfpride will give your fleet the finest lubrication that money can buy. And if you think that is a strong statement, you can *prove it* to your satisfaction with a trial in your own units . . . let your own books give the verdict.

Gulfpride
Reg. U. S. Pat. Off.

THE WORLD'S FINEST MOTOR OIL

GULF

Gulf Oil Corporation
Gulf Refining Company
Pittsburgh, Pa.

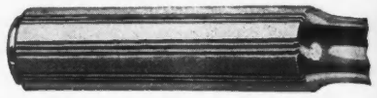
When writing to advertisers please mention Commercial Car Journal

NEW PRODUCTS ON PARADE

(CONTINUED FROM PAGE 38)

Blackhawk Wrenches

BLACKHAWK MFG. CO., Milwaukee, has introduced a new portable wrench set known as the Red Rover and may be obtained with an assortment of 70, 80 or 90 tools



in its three drawers. A feature of the Blackhawk wrenches is the new "gripline" handle which is grooved for easier handling.

(MORE NEW PRODUCTS ON PAGE 90)

A Cure for BRAKE HEADACHES
EVERY fleet owner and superintendent has had "Brake lining headaches." Unusual quick wear causing frequent adjustment, delays and high maintenance expense — loss of holding power at a critical time — is costly, irritating and unnecessary.
From fleet owners all over the country comes performance evidence that Gatke Blocks and Lining solve brake problems for all applications.
Here are a few comments:
"Less service and maintenance work." "Retains efficient braking action after long, hard service." "Does not glaze after continual hard usage." "— On long, steep grades — tight schedules — I recommend Gatke Brake Blocks to everyone."
Gatke Brake Lining, Woven and Moulded furnished in Custom-Bilt BLOCKS, Sets, Rolls, Radius slab units.
Ask your material Gatke jobber or write us for recommendations and complete information.
Gatke QUALITY
GATKE CORPORATION
228 N. LaSalle Street Chicago, Illinois

LITERATURE FREE

Note: Any of the following items may be obtained by filling in the coupon on page 17.

11. GENERAL Electric Co., Nela Park, Cleveland, Ohio, has prepared a Safety Lighting Service Manual containing valuable information on the selection, care and adjustment of various lighting equipment. It is the most complete manual of its kind yet compiled, and is being specially offered to fleet operators.

12. MIDLAND Steel Products Co., Madison Ave. and West 106th St., Cleveland, Ohio, has issued a 12-page leaflet containing full description and service instructions for Midland-Christensen vacuum power brake equipment, and also a complete service manual of Midland-Steeldraulic trailer brakes. Included in the former are thorough descriptions of single and dual line equipment, hand and foot control valves, relay valves, cylinder, etc., as well as typical installation of drawings of equipment complying with the new I.C.C. Regulations.

13. AMERICAN Brakeblock Corp., Detroit, has issued a Ready Reference Brake Service Guide containing valuable service information on all popular brake installations.

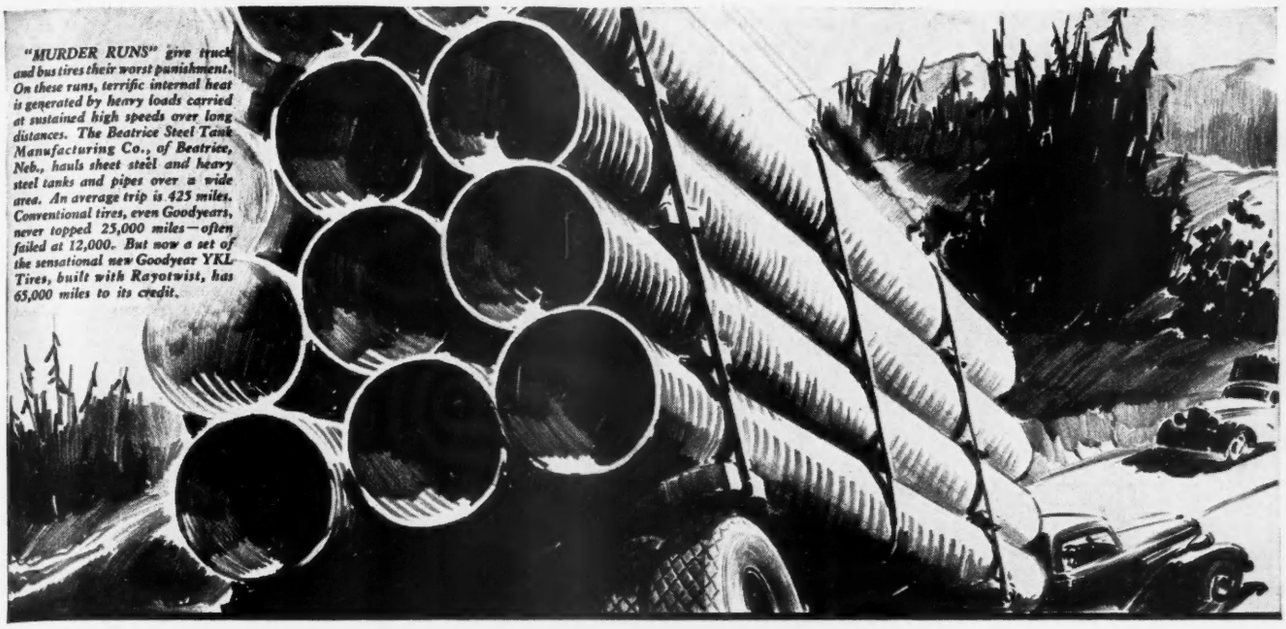
14. FEDERAL-MOGUL Corp., Detroit, announces a new edition of its bearing replacement catalog containing 94 pages, and approximately 4000 bearing numbers. In additions to bearing listings for practically all American engines, the catalog describes many new products such as a new camshaft bearing tool for Ford V-8 engines, an out-of-round gage, the F-M oil leak detector and many others.

15. IMPERIAL Brass Mfg. Co., 1200 Harrison St., Chicago, offers a leaflet containing useful information on brass fittings and a size and price list of the five most popular styles.

16. M. B. SKINNER Co., South Bend, Ind., has prepared a Pipe Repair Handbook showing the use of various types of Skinner-Seal pipe clamps for all types of pipe repairs.

17. U. S. STEEL Corp. Subsidiaries, Pittsburgh, Pa., has issued a 68-page spiral bound booklet showing many uses of "Cor-Ton" steel particularly in the transportation field.

18. THE WEATHERHEAD Co., Cleveland has prepared a handy card illustrating all standard Weatherhead fittings. Parts can be quickly identified by comparison with the pictures on the chart and the proper replacement part determined.



"MURDER RUNS" give truck and bus tires their worst punishment. On these runs, terrific internal heat is generated by heavy loads carried at sustained high speeds over long distances. The Beatrice Steel Tank Manufacturing Co., of Beatrice, Neb., hauls sheet steel and heavy steel tanks and pipes over a wide area. An average trip is 425 miles. Conventional tires, even Goodyears, never topped 25,000 miles—often failed at 12,000. But now a set of the sensational new Goodyear YKL Tires, built with Rayotwist, has 65,000 miles to its credit.

"TEN TONS ON A 'MURDER RUN' . . . SURE, THAT'S TOUGH ON TIRES, BUT— HERE'S A TIRE THAT'S TOUGH TOO!"

MAKE NO mistake about it—here's a tire that's tough—too tough in fact for most trucking operations.

But if your trucks ply those heavy-duty "murder runs" over long distances at high speeds—and if you are looking for the greatest mileage per dollar you can get out of your tires—then you need this great new Goodyear super tire.

It's the new YKL—one of the most sensational, mileage-jumping truck tires Goodyear has ever produced.

Shattering all records for long life in fast, brutal, tire-killing service, the YKL is piling up amazing savings for operators—delivering two, three, even four times the mileage of conventional tires in the same service.

Goodyear engineers spent years developing this new tire for you—finally conquered murderous internal heat with a new material known as Rayotwist—ended premature tire death.

Now, if your runs are tough enough to require it, this great YKL will give you the most amazing performance you've ever experienced—thousands of extra miles—extra savings.

For operations less severe, there are other Goodyears that will deliver equally spectacular service. Goodyear builds more types and sizes than any other manufacturer—all just as carefully fitted to other trucking operations as the YKL is to the "murder runs".

That's why we say: "Put Goodyears—the right Goodyears—on *any* job and watch your mileage jump!"

CAUTION: Goodyear engineers now recommend the new YKL Tire only for "murder runs"—those types of service in which excessively high temperatures are built up inside the bodies of the tires. This destructive internal heat may result from sustained high speeds, extremely heavy loads, brake-drum heat or other causes.

In ordinary trucking, the extraordinary capacities of the YKL cannot be fully utilized—and, frankly, its higher price cannot be justified.

OTHER GOODYEAR PRODUCTS THAT SAVE MONEY!

Goodyear Batteries, in sizes for all trucks and autos, are built to the highest specifications in the industry and with a reserve of power and stamina for the toughest energy-draining requirements.

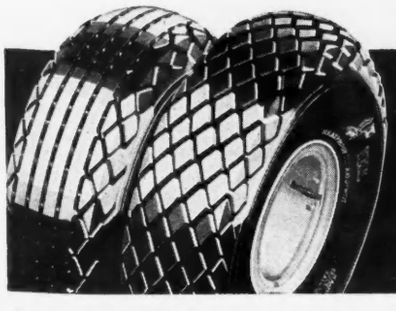
Goodyear Rims save time, trouble, tires and money. They are stronger, safer—changed in a jiffy—made for either steel or spoke wheels. Specify them on every new truck.

Goodyear Fan Belts are as precisely made as Goodyear's big industrial belts—the longest-lasting, most efficient made.

Goodyear Radiator Hose—the finest money can buy. Specially compounded to resist anti-freezes, boiling temperatures, constant flexing.

THERE'S A REAL KICK IN A GOODYEAR BATTERY

THE GOODYEAR TIRE & RUBBER COMPANY, INC.
AKRON, OHIO



GOODYEAR TRUCK TIRES

When writing to advertisers please mention Commercial Car Journal

NEWS SUMMARY

August Truck Production New Record for Month

Truck production in the United States and Canda during August sets a new high record for the month totaling 87,794 units. This was an increase of nearly 38 per cent over the same month in 1936 when the production figure was 63,794 units, and approximately five per cent above the July, 1937, figure of 83,993. Production during the first eight months of 1937 totaled 705,426 units compared with 603,258 in the same period of 1936, a gain of 17 per cent.

New truck registrations during August, based on estimates from 36 states, totaled 58,500 units compared with 57,528 in August, 1936, and 59,451 in July. Total registrations for the first eight months were 460,000 units, a four per cent gain over 443,399 in the same period last year.

Railroad Control Discussed

Railroad control of motor carriers should be restricted to operations clearly auxiliary or adjunctive to the railroad service as the only means of preserving and fostering the inherent advantages of motor transportation, according to a brief just filed with the Interstate Commerce Commission by The National Industrial Traffic League in the reopened proceeding involving the acquisition of Alko Express lines by Pennsylvania Truck Lines, Inc. Such operations, the League contends, should be limited to pick-up and delivery, way freight or branch line service, or possibly in cases where there is no established motor carrier service.

"In future cases," says the brief, "it is possible that types of motor carrier service other than the above may appear as adjunctive to railroad operation and thus come within the limitation of the proviso as we interpret it; in the absence of a clear showing to that effect, any such acquisition should be denied."

Newark Truck Show

Applications for space at the Fourth Annual National Motor Truck Show, to be held in the Centre Market Building, Newark, N. J., Nov. 6 to 12, far exceeded space allotted last year, according to A. L. Rice, secretary. Nevertheless allotment of space has been completed and exhibits will utilize the entire first floor and a large part of the second floor.

Blanning Promoted to I.C.C. Directorship

Wendell Y. Blanning

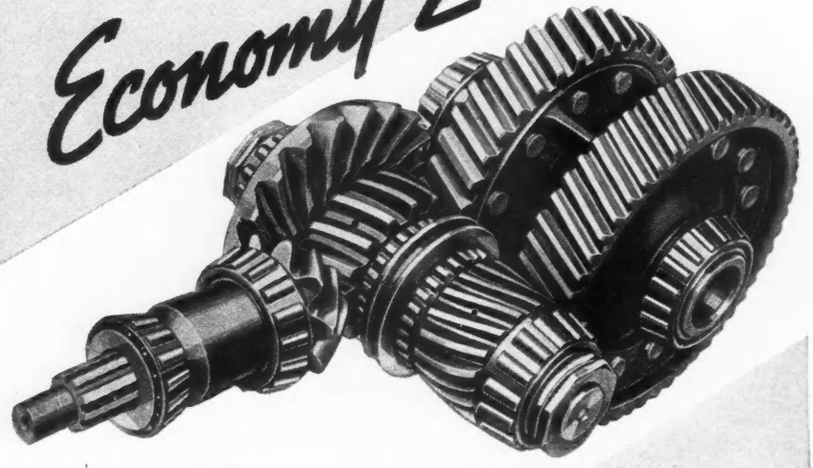
Wendell Y. Blanning took up his duties as Director of the Bureau of Motor Carriers, Interstate Commerce Commission, on Sept. 18, following his promotion to that position from the Assistant Directorship. He succeeds his former chief, John L. Rogers, first director of the Bureau of Motor Carriers, who was recently appointed by President Roosevelt as a member of the Interstate Commerce Commission, succeeding Commissioner Hugh M. Tate. Mr. Rogers has been assigned to Division 5, which has charge of administration of the Motor Carrier Act.

In taking over the directorship of the Motor Carrier Bureau, Mr. Blanning is in charge of a vastly preponderant number of cases on the Interstate Commerce Commission docket. Torrent-like they have poured into the Commission since the Motor Carrier Act became effective. Indicative of their volume, Mr. Blanning told COMMERCIAL CAR JOURNAL that there have been 80,000 "grandfather" applications cases alone. Disposition has been made of about 2000 and hearing held on about 40,000 such applications. Mr. Blanning said that, judging by past performance, it will take about nine months before the docket is cleared of grandfather cases.

Speaking of the trend of motor truck operations, Mr. Blanning said that undoubt-

(TURN TO PAGE 44, PLEASE)

KEEPS THE LOAD ROLLING IN THE *Economy Zone*



TIMKEN *2-Speed* AXLE

You get top-efficiency performance *all the time* from your truck engines, with the Timken 2-Speed Axle. Faster speed on level roads, faster speed on grades—and above all, the husky Wisconsin Double-Reduction gears.

Look carefully—then buy Timken—to keep loads rolling faster on all roads.

How to keep your trucks operating in "The Economy Zone" is the subject of a valuable booklet. Mailed on request.

TIMKEN AXLES "The Accepted Standard" D A CO

TIMKEN-DETROIT AXLE CO., Detroit, Mich.
WISCONSIN AXLE DIVISION, Oshkosh, Wis.

2-SPEED DOUBLE REDUCTION AXLES

UNLESS YOU CAN ANSWER "YES" YOU'RE *NOT* USING THE RIGHT BODY CONSTRUCTION MATERIAL

1. Are the side panels flat with absolutely no trace of waves or distorted high lights?

2. Are the side panels lighter than steel and seven times stronger than steel?

3. Is the body rigid and strong without an excessive number of inside braces and supports?

4. Do you get the maximum "payload" in your commercial body?

5. Is all dead weight eliminated? Every pound accounted for?

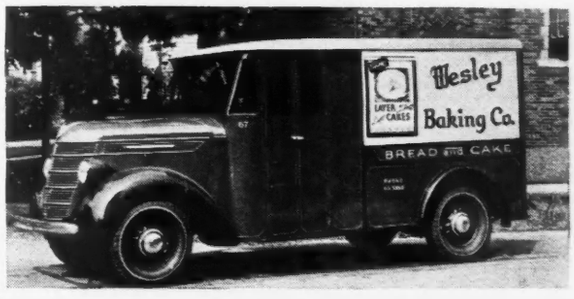
6. Are the body panels large, replaceable, one-piece units?

You can answer "yes" if the body construction in your truck or trailer is Plymetl. If you cannot answer "yes," writes us for sample and price quotation.

SPECIALLY RECOMMENDED FOR BAKERY TRUCKS

Phemaloid is the best flooring material available for bakery trucks because it comes in large, one-piece panels, which mean less cutting and fitting and fewer joints, and therefore dust and dirt cannot seep in.

Illustrated at right, a new Plymetl body built for Wesley Baking Company by the Hulet Top & Body Co.



"PLYMETL"

HASKELITE MANUFACTURING CORPORATION

208 West Washington St. • Chicago 6432 Cass • Detroit Chrysler Building • New York

(CONTINUED FROM PAGE 42)
edly there will be an increase in the number of large lines through consolidations and extensions. But "in our time" the number of small lines will continue to exceed the large lines, he stated, while at no time will there be any territory dominated by a big company.

New York Show

Seven makes of commercial vehicles will be on display at the National Automobile Show, to be held in New York Oct. 27 to Nov. 3. They are Chevrolet, Dodge, Terraplane, Plymouth, Pontiac, Reo and Willys.

Biggers To Head Census

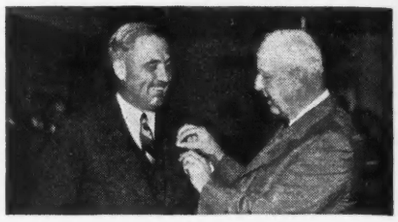
Well known in the automotive field because of his prominence in the glass industry, John David Biggers, head of the Libbey-Owens-Ford Glass Co., Toledo, Ohio, has accepted after some urging by President Roosevelt the job as chief of the voluntary unemployment census survey.

New Franklin Company

Air Cooled Motors Corp., which recently took over the plant, assets, patents and good will of Doman-Marks Engine Co., Inc., Syracuse, N. Y., announces the acquisition of the name, trade-mark and patents of the defunct Franklin Automobile Co.

According to Lewis E. Pierson, Jr., president, Air Cooled Motors Corp. will continue to manufacture heavy duty air-cooled units for use in trucks, air compressors, saw mills and other industrial equipment. These will be offered under the Franklin name and will be available for replacement purposes.

E. S. Marks and Carl Doman, who were chief engineer and experimental engineer, respectively, for Franklin and later founded the Doman-Marks Engine Company, Inc., are officers in the new company and will head the technical and production staff.



President P. W. Litchfield of The Goodyear Tire & Rubber Co., pins a 25-year service award on the lapel of Vice-President R. S. Wilson, in charge of sales. Mr. Wilson's first important position with the company was that of truck tire sales manager.

AMA Campaigns on Headlight

To minimize headlight glare in the eyes of 40,000,000 drivers and all pedestrians, the Automobile Manufacturers Association announced here today that its member companies are undertaking a comprehensive program to encourage proper use and maintenance of headlamps. This new program will supplement the extensive activities in the general field of highway safety which the industry is supporting through the Automotive Safety Foundation.

Fleet Sales Convention

The Fleet Sales division of General Motors Sales Corp. held its annual sales convention in Detroit, Sept. 20 to 24, celebrating the organization's 10th anniversary.

Auto Truck Expands

Auto Truck Equipment Co., Pittsburgh, Pa., recently celebrated the opening of their new and completely modernized offices, made possible by alterations totaling approximately $13,000.

EARNINGS

THE B. F. Goodrich Co., Akron, Ohio, reports consolidated net profits of $4,010,687 for the first six months of 1937 compared with $2,727,606 in the same period last year. Both figures are taken after deductions, interest and estimated Federal taxes.

THE White Motor Co., Cleveland, Ohio, announces total net earnings of $653,197 for the six-month period ending June 30, after deduction for all charges except the Federal surtax on undistributed earnings. Earnings for the same period in 1936 were $287,421 before provision for Federal taxes.

The EDISON MPD Survey gives you a definite way to cut battery expenses

Battery maintenance sometimes costs more than it should. The reason can often be condensed into six words — *using the wrong type of battery.*

It is impossible to choose a correct battery by size of vehicle alone. The amount of service and specific kinds of service . . . accessory equipment and night driving—these and other factors necessarily affect battery efficiency. The EDISON MPD Survey assembles and collates these factors in order to find exact battery requirements. Experience shows that the Survey can produce substantial savings in operating costs.

EDISON Highway Transport Batteries are built to give your fleet the stamina it needs. The MPD Survey assures stamina *plus* economy!

EDISON Emark HIGHWAY TRANSPORT BATTERIES

THOMAS A. EDISON, Incorporated — Emark Battery Division, Kearny, N. J.

Thomas A. Edison, Inc.
Emark Battery Division, Kearny, N. J.

☐ We would like to arrange for a free EDISON MPD Survey of our fleet.

☐ Send us further information about your MPD method of figuring battery economy.

Firm _____

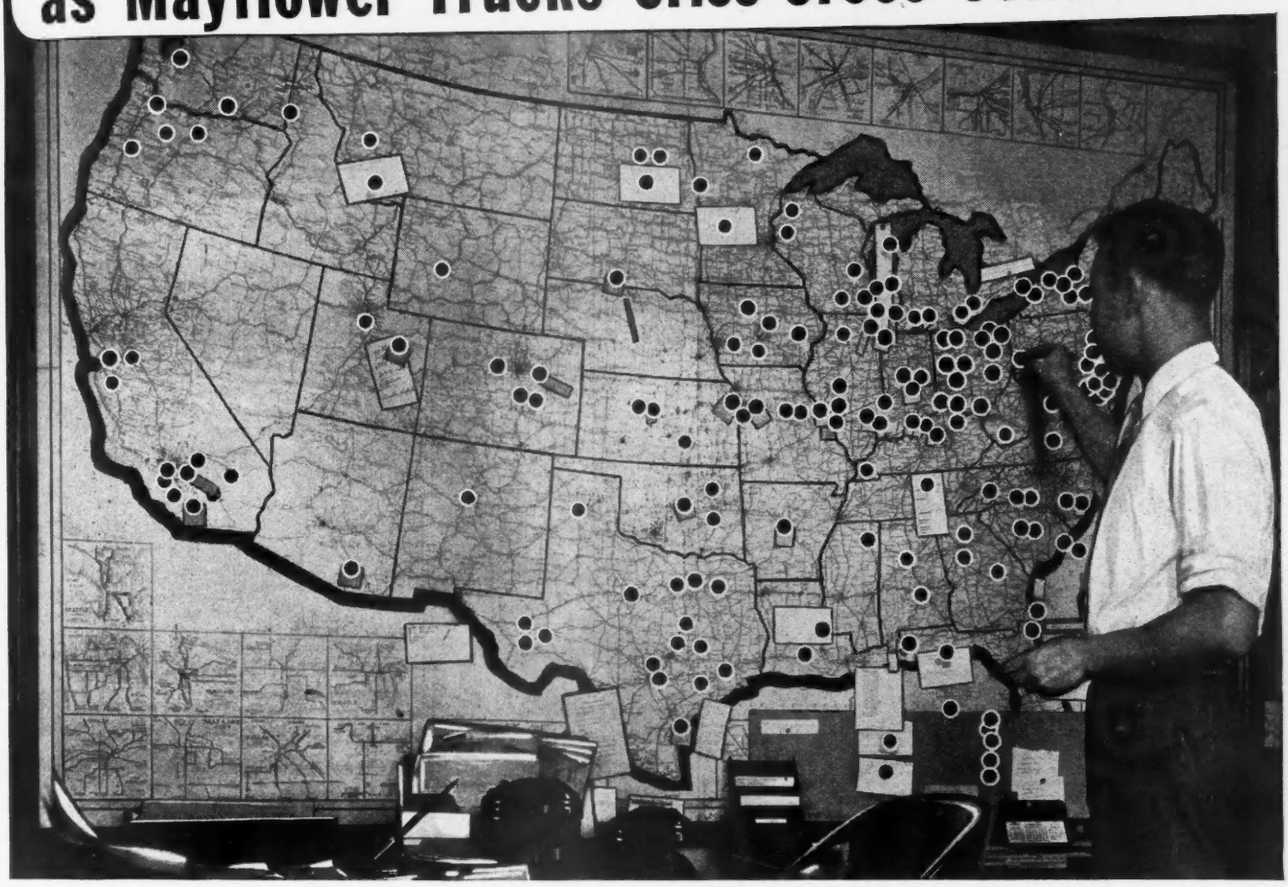
Individual _____ *Position* _____

Address _____

City _____ *State* _____

C-10

EVERY DAY IS MOVING DAY
as Mayflower Trucks Criss-Cross Continent



Night and day the dispatcher charts the location of trucks on this huge map.

Like the Clipper Ships that sailed the seven seas, trucks of the Aero Mayflower Transit Company travel the 48 states. One haul often takes a truck from coast to coast. Across mountains, deserts, plains. Through blizzards, sandstorms, cloudbursts. Over good roads and axle-deep mud detours. A marathon test for tires!

Vans Make Long Trips

When a load is delivered, there's another waiting. Truck No. 252 may head for Dallas out of Atlanta. From there to Denver. Denver to Omaha, to Duluth, to Milwaukee—down south to Nashville—then perhaps home to headquarters at Indianapolis.

They're long hauls, hard hauls when you move household goods nationwide. Vans are on the road constantly.

It's tough on the trucks and tires. All in all, these trucks travel many millions of miles annually—with every mile a "third degree" for tires. But Goodrich Silvertowns never let them down.

Where you find the toughest hauling jobs, you usually find Goodrich Triple Protected Silvertowns. Truck owners who have severe operating conditions, who want 100 cents' worth of wear from every dollar, know that Goodrich means economy.

Goodrich Silvertowns are built for the hardest hauls—do a better job on any haul. They're *Triple Protected* against the commonest cause of premature failure. They positively check four out of five of all sidewall breaks. Only Goodrich gives you this 3-way safeguard:

1 **PLYFLEX**—distributes stresses throughout the tire—prevents ply separation—checks local weakness.

2 **PLY-LOCK**—protects the tire from breaks caused by short plies tearing loose above the bead.

3 **100% FULL-FLOATING CORD**—eliminates cross cords from *all* plies—reduces heat in the tire 12%.

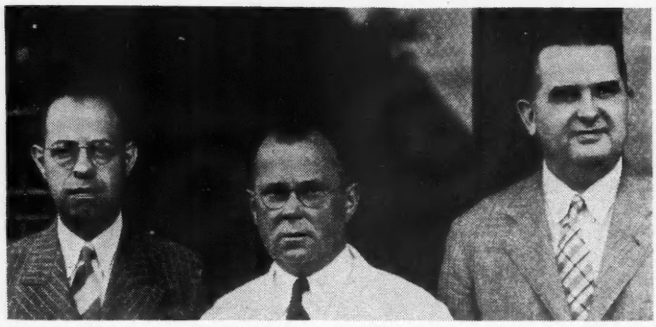
And yet these are not premium price tires. You can buy them at regular prices, use them on fast or slow runs, for heavy loads or light and get thousands of extra miles.

Take a tip from Aero Mayflower, from big fleet owners everywhere, and use only Goodrich Silvertowns.

Goodrich *Triple Protected* Silvertowns

SPECIFY THESE NEW SILVERTOWN TIRES FOR TRUCKS AND BUSES

When writing to advertisers please mention Commercial Car Journal



Through district sales conventions these USL representatives have been backing new promotion campaigns. They are: W. E. Blank, sales manager; R. T. Pierson, vice-president, and E. D. Giauque of Baldwin & Strachan, Inc.

Members of International Harvester Co.'s Triple Diamond Club, made up of the company's crack salesmen, recently conferred an honorary membership upon William F. McAfee, sales manager. Left to right are: W. C. Herald, manager, motor truck sales, Canada; J. L. McCaffrey, director, domestic and Canadian sales; S. E. Houston, editor, International Trail; Mr. McAfee; C. J. Dell, national account salesman, Chicago; P. V. Moulder, manager, motor truck sales, and C. R. Morrison, vice-president in charge of domestic and Canadian sales

What's the Truck Owner Thinking About?

Here are some of the "tough ones" that are probably puzzling your mind as business recovery speeds up nowadays:

1. How much time do my trucks spend waiting for a load, with idle time costing $4.00 an hour?
2. The big truck made only two trips today—what's the reason?
3. They say we need to buy another truck—do we?
4. This speeding is ruining my trucks. How can I make 'em stop it?
5. Are any of my trucks used at night?
6. This overtime—is it necessary?
7. I'd like to plan the routes better, but first I need some facts to go on. Etc.,etc.

This chart shows up all delays.

Here's a stop of 2 hours!

Here's real help for you. It's all in our Booklet—"Ten Ways of Getting More Work Out of Motor Trucks."

It's FREE for the asking. Send for it today!

THE SERVICE RECORDER COMPANY
1422 EUCLID AVE. • CLEVELAND, OHIO

The Servis Recorder
Tells Every Move Your Truck Makes

APPOINTMENTS

MACK Mfg. Corp. recently elected L. C. Josephs, Jr., chief engineer, to the office of vice-president and a member of the board of directors.

CURTIS C. STEWART, for the past six years general manager of the Cartage Exchange of Chicago, has been named managing director of the Indiana Motor Traffic Association with headquarters in Indianapolis.

LAMINATED SHIM Co., Inc., Long Island City, N. Y., has announced the appointment of Richard Seipt as sales manager. He has been with the company for the past two years and was formerly with the John Wood Mfg. Co.

Phil Sommerlad, left, and Charles A. Cole who have recently been promoted by Thompson Products, Inc., Toledo, to the positions of eastern and western sales managers, respectively. Both men will serve under E. T. Syvertsen, general sales manager

FOUR WHEEL DRIVE Auto Co. has appointed Chauncey Williams general factory foreman at Clintonville. Mr. Williams assumes his new duties at once succeeding Curran C. McConville, who died suddenly last month.

WINTON Engine Corp., Detroit, has named Max H. Schachner as assistant sales manager, charged particularly with the responsibility of directing sales of the new Winton 2-cycle diesel engine.

MORE NEWS ON PAGE 88

OVERDRIVE 3rd

Ever noticed how often you're forced back to 3rd by slight grades, traffic, or wind resistance? A lot of times, aren't you? When you're in 3rd, you have to race the engine or lose road speed, don't you? Well, that's because there's too big a jump between 3rd and High. There's a difference of around 15 miles an hour. That's why we have an overdrive 3rd in the Watson-Brown-Lipe Auxiliary Transmission. With it, you can run about 8 miles an hour faster than in regular third, without racing the engine or losing time. It's a *pulling* gear, too . . . doesn't lug the engine. Of all the 12 Watson-Brown-Lipe speeds, truck operators talk more about this remarkable overdrive 3rd than any other gear because it's something they've needed badly . . . for it *saves time!*

AND THAT'S ONLY A FRACTION OF WATSON-BROWN-LIPE BENEFITS

With 12 speeds you can handle every load and every road easier and quicker. You always have a ratio that exactly fits the need. Watson-Brown-Lipe Auxiliary Transmissions save truck time and make any truck earn more money wherever it goes . . . whatever it does!

SEE THE NEAREST DEALER . . . DEALERS EVERYWHERE

GET THIS BOOK

It tells you all about Watson-Brown-Lipe Auxiliary Transmissions and why it will pay you to equip your truck with one.

AUXILIARY *Transmissions* **WATSON-BROWN-LIPE** H.S. WATSON CO., SAN FRANCISCO & TOLEDO

When writing to advertisers please mention Commercial Car Journal

Servicing Carter Carburetor

(CONTINUED FROM PAGE 31)

32. Replace ball checks if any.

33. Replace steel ball in pump cylinder. Be careful not to get it in center hole of pump cylinder.

34. Replace pump piston needle seat and gasket assembly (M). Be sure jet is screwed in tight.

35. Replace pump piston needle and plug assembly (L). Test small piston on outer pump piston and see that it does not hang but moves freely.

36. Replace pump rod and piston assembly mentioned in paragraph 11. Hold carburetor on its side with idle adjustment screw down. Start connector link in guide and plunger into pump cylinder. Do not drop small plunger from its correct position.

37. Replace pump operating link (J) and pin spring (I).

38. Replace needle and seat assembly (C).

39. Replace float and lever assembly (G). Check float according to specifications. Be sure lip of float is at right angle to intake needle to assure free movement of needle in seat.

40. Replace float lever pin and plug assembly (F) and check float level according to table accompanying this article.

41. Replace step-up push rod (E) with small end downward.

42. Replace step-up piston assembly in upper casting using new gasket.

43. Install new body gasket and step-up passage bushing (No. 38A-26) whether or not carburetor was originally equipped with this part.

44. Replace upper casting. Turn each screw a little at a time until all are seated tightly.

45. Replace pump jet (R). Be sure it is tightly seated.

46. Replace pump jet plug (Q).

47. Replace main metering screw (S) and gasket.

48. Replace carburetor on motor and connect gas line.

49. Tighten flange nuts. Be careful to pull them down evenly.

50. Connect choke tube and wire. Be sure dash knob is in and valve is open.

51. Connect throttle rod.

52. Wash air cleaner in gasoline, dry with air, and install on carburetor.

THE REASON: Because Midland combines dependable, safe braking performance with *proved* low-upkeep cost. Midland Power Brake Units—both air and vacuum—are economical to buy and still more economical to maintain. These power units are thoroughly engineered and guaranteed by one of the nation's largest manufacturers of automotive parts—all used in the production of passenger and commercial vehicles. Follow the lead of the nation's largest fleets—specify Midland Power Units!

Check These MIDLAND FEATURES

- ✓ *Never cost more* and generally *less* than other power brake equipment.
- ✓ Highly efficient because of their light weight, simple design and sturdy construction.
- ✓ Serviced by a nation-wide organization of Midland Distributors.
- ✓ Adapted to all types of vehicles.
- ✓ Patented control valve gives "Brake Feel."

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Complete kits, containing every nut, bolt and screw needed—plus complete instructions for installation—are available for Ford, Chevrolet, Dodge, International and G. M. C. trucks and tractors. Consult your nearest Midland distributor for facts about vacuum or air power brakes. Or write us direct.

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THE MIDLAND STEEL PRODUCTS CO.
10605 MADISON AVE. • CLEVELAND, O.

MIDLAND POWER BRAKE EQUIPMENT
MIDLAND (CHRISTENSEN) Power Brakes
SAFETY POWER

Stewart 51A

(CONTINUED FROM PAGE 34)

draft carburetor is equipped with oil bath air cleaner.

The tubular radiator core with large top tank is enclosed in a pressed steel "V" type shell with chromium plated grill. Ignition system is Delco-Remy. The clutch is 13 in. dry plate type, equipped with vibration dampeners and the transmission has five speeds forward with quiet overdrive; an auxiliary 3-speed transmission can be furnished at extra cost.

The rear axle is of the full floating type with heavy electric furnace cast steel housing. Gears are spiral beveled with straddle mounted pinion.

Side rails of the frame are 10 in. deep at its greatest depth. Heavily gusseted cross members are hot riveted to the side rails, providing a sturdy backbone for the entire chassis. Front springs are 38½ in. long, 2¼ in. wide and have 13 leaves, rear springs are 50 in. long, 3 in. wide and have 14 leaves. Helper springs are standard. Torque arms or radius rods are installed as standard equipment.

Lockheed hydraulic brakes are operated by Bendix power booster.

Standard wheelbase of this model is 144 in. Special wheelbases of 154 in., 170 in., 188 in., 205 in. and 220 in. are available at extra cost.

COMMERCIAL CAR JOURNAL'S TRUCK SPECIFICATIONS TABLE

The Specifications Table is brought up to date in each issue from data supplied monthly by truck manufacturers

KEY TO ABBREVIATIONS AND REFERENCE MARKS

GENERAL

Make and Model—Only basic models are listed. Variations are available with most manufacturers.
Tonnage Rating—Where a spread of ratings is given the maximum ratings are for ideal operating conditions and the minimum for extremely difficult conditions; the ranges between are for varying operating conditions.
Chas. is Price—Chassis price quoted applies to standard wheelbase with standard tires. All prices are F.O.B. factory.
(***)Prices ready next issue.
Gross Vehicle Weight—Is chassis weight stripped, plus body and cab weight, plus payload. Gross vehicle weight is based on maximum recommended tire size, not on tires listed as standard.
Chassis Weight Stripped—Is weight of standard chassis with standard equipment, with crankcase and cooling system full, and 5 gal. of gasoline in tank. Does not include weight of cab. Exceptions are noted.
Maximum Tire Size—Is furnished at extra cost, if the maximum differs from the standard tire size. Dual rears are understood except where otherwise noted.
Maximum Brake H.P. at Given R.P.M.—Is actual dynamometer reading without accessories.
Gear Ratio Range in High—Ratios within the range given are available at no extra cost. Exceptions are noted.
Tractors—Unless given the designation N (meaning not available as tractor), all standard models may be assumed to be available as tractors.
(D)—Diesel equipped.
(N)—Not available as tractor.
(T)—Specifically designed for tractor use only.
c.o.e.—Cab-over-engine design.
e.b.s.—Engine-between-seat design
e.u.s.—Engine-under-seat design
(1) **Autocar**—Larger service brake areas on rear axles are provided when tires of 24" base are supplied.
(a) Price does not include auxiliary axle. Chassis weight includes auxiliary axle complete; area of brake lining and drum area do not include auxiliary rear axle.
(d) Models intended for dump or tractor service only.
(2) **Biederman**—Will furnish Continental, Hercules, Waukesha and Lycoming engines at the buyer's option.
(3) **Chevrolet**—For export only.
(*) **Chevrolet**—Governor set not to exceed 45 M.P.H. Export rating 12,300 lb.
(4) **Ford**—Retail list price at Dearborn. Includes: Front Bumper with two Bumper Guards, five wheels, two 6.00/20 front tires, two 32x6 rear tires and spare wheel carrier; also governor on 60 H.P. engine only.
(5) **Ford**—Retail list price at Dearborn. Includes: Front and Rear Bumpers, five 6.00/16 4-ply tires, spare wheel carrier and spare tire lock.
(6) **General Motors**—Tire size indicated in column "Maximum Tire Size Furnished" is maximum capacity dual tires recommended for normal operating conditions. F-16L, ¾-1 ton, same as F-16, except light riding springs and 4.57 to 1 gear ratio. T-16 to F-61H inclusive are also available for export only as coach chassis. Dual performance rear axles at extra cost for T-16 to T-46 inclusive and F-16 to F-46 inclusive. Double reduction rear axle at extra cost for T-33H, T-46, F-33H, and F-46. GMC "239" engine at price deduction for T-23 and F-23. GMC "286" engine at extra cost for T-23H and F-23H. GMC "400" engine group option at extra cost for T-46 and F-46. GMC "450" engine at extra cost for T-61, T-61H, F-61, and F-61H.
(7) **Hendrickson**—All models available in cab-over-engine design for slight additional charge.
(8) **International Harvester**—Those International Truck Models carrying dual tonnage ratings when suffixed with letter L or H are given the lower or the higher tonnage authorization of that dual rating respectively. Example: Model D-40 two to three tons. Model D-40-L two tons. Model D-40-H three tons. This method of rating is based on careful consideration of the nature of the roads to be traveled, the magnitude of the loads to be transported, the traveling speeds involved and in general the all around severity of the operation.
(9) **International Harvester**—Model C-10, ¾-ton, same as C-20 except less spring leaves. Model C-12, ¾-ton, same as C-30 except less rear spring leaves.
(10) **Le Moon**—Models 306, 406, 506 and 610 are available as cab-over-engine models.
(11) **Mack**—Cab and body included in list price.
(12) **Mack**—Cab now included in list price.
(a) **Mack**—Weight in Chassis Weight column is shipping weight which includes weight of a chassis of medium standard wheelbase, cab, prevailing tire size and spare tire, ready for the road.
(13) **Moreland**—Models E-220D and E-260D available as diesel with Hercules DRXB engine.
(13a) **Moreland**—H-340 also available with Continental 22R and as diesel with Hercules DRXB and Cummins HB.
(13b) **Moreland**—Chain drive Model HC-340 also available with Continental 22R and as diesel with Hercules DRXB and Cummins HB.
(13c) **Moreland**—Chain drive Model TC-420 available as diesel with Hercules DHXB and Cummins HB.
(13d) **Moreland**—Model HD-400 also available with Continental 22R and as diesel with Hercules DRXB and Cummins HB.
(13e) **Moreland**—Model TD-420 available as diesel with Hercules DHXB and Cummins HB.
(14) **Reo**—Price includes cab and pick-up body
(15) **Schacht**—Available in E. B. S. design at additional cost.
(16) **Sterling**—Available with Diesel.
(17) **Walker**—Frame lengths may be changed, within limits, to suit individual requirements, at no additional cost.
(18) **White**—Each model shown is furnished with different specifications for different tonnage ratings. (*)—Factory governed speed 2400 r.p.m.
(*) **White**—Tractor rating only.
(19) **Coleman**—Model A-68 also furnished with Sterling LT-6 engine and Brown-Lipe Transmission No. 714. List price $13,000.
(20) **Indiana**—These models are for Government use and their chassis price depends upon quantity ordered.

MAKES—ALL

A LaF—American La France.
B—Bendix. **BL**—Brown-Lipe.
BO—Bendix front, Own rear.
Bu or Bud—Buda.
Cat—Caterpillar. **Cl or Cla**—Clark.
Co—Covert. **Con**—Continental.
Cum—Cummins-Diesel
Eat—Eaton. **Fu**—Fuller.
Ha S—Hall Scott
Her—Hercules. **L**—Lockheed.
LO—Lockheed front, Own rear
LW—Lockheed front, Wisconsin rear.
Lyc—Lycoming
N.P.—New Process.
O or Ow—Own.
Op or Opt—Optional
Shu—Shuler.
Spi—Spicer. **Ste or St**—Sterling.
T or Tim—Timken
T&M—Timken & Moreland
TW—Timken-Wisconsin
TWH—Timken Wisconsin Herrington
WG—Warner Gear
WH—Wisconsin Herrington.
W-Hes—Waukesha Hesselman.
Wau—Waukesha.
W or Wis—Wisconsin
Ws—Westinghouse.

BRAKES—SERVICE

Location

2—Two Wheels, rear only.
2/4—Two-wheel brakes effective on all four wheels through driveshaft.
4—Four Wheels, front and rear.
4r—Four Wheels, rear only.
6—Six Wheels, front and rear.

Type

I—Internal. **X**—External.

Operation

A—Air.
D—Hydraulic and mechanical.
H—Hydraulic.
M—Mechanical.
V—Vacuum.

BRAKES—HAND

Location

C—Center of double propeller shaft.
2—Rear wheels. **4**—Four wheels.
J—Jackshaft.
R—Worm or bevel gearshaft.
T—Transmission.
P—Driveshaft
P—Propeller shaft.

Type

D—Tru-Stop disk
I—Internal. **X**—External.

BRAKE DRUMS

Material

a—Cast alloy iron.
A—American Car Fdry.
C—Centrifuse. **D**—Dayton.
E—Ermalite. **F**—Furnace Iron.
G—Gunite. **H**—Hunt Spiller.
N—Nickel Iron. **c**—Cast iron.
p—Pressed steel. **P**—Pressed steel.
s—Cast steel.
(Where a combination of any of the above is used, the first reference mark applies to the front and the second to the rear drums.)

FRAME

Type

I—"I" Beam. **C**—Channel.
T—Channel tapered front and rear.
L—Channel reinforced with liner.
B—Channel reinforced with both liner and fishplate.
P—Channel reinforced with plate.
TL—Channel tapered front and rear reinforced with liner.
D—Drop Center.
Tf—Tapered front.
X—**x**-Braced.

GOVERNOR STANDARD

Y—Yes. N—No.

REAR AXLE

Final Drive and Type

B—Bevel. **C**—Chain.
D—Dead. **F**—Full-floating.
Hy—Hypoid
2—Double Reduction.
S—Spiral bevel.
W—Worm.
w/2—Worm or Double Reduction Optional.
½—Semi-floating.
¾—Three-quarter floating.
(*) Ratios other than standard at extra cost.
(**) Only one ratio.

Drive and Torque

A—Radius Rods and Torque Arm.
H—Hotchkiss. (springs)
R—Radius Rods
T—Torque Arm.
U—Torque Tube.

WHEELS DRIVEN

2F—Forward unit of Rear Axle Group.
2R—Rear Unit of Rear Axle Group.
4R—Forward and rear units of Rear Axle Group.
4F—Front Axle and Forward unit of Rear Axle Group.
4FR—Front axle and rear unit of rear axle group.
6—All wheels.

FORMULAS

(For Transportation Engineering)

Miles Per Hour

$$M.P.H. = \frac{R.P.M. \times D.}{336 \times F.G.R.}$$

M.P.H.=Miles per hour.
R.P.M.=Revolutions per minute.
D.=Effective tire diameter.
F.G.R.=Final gear ratio.

Grade Ability

GA=TE—RR.
GA=Grade ability.
TE=Tractive effort.
RR=Road resistance—.012 for hard surfaced roads.

Tractive Effort

$$TE = \frac{\text{in. lb. torque} \times F.G.R. \times EFF.}{G.V.W. \times R.}$$

EFF.=Efficiency—.90 for all rear axles except worm then .85.
R.=Rolling radius.
G.V.W.=Gross vehicle weight.
in. lb. torque=12 x torque in lb. ft.

Torque in LB. FT.

Torque=.65 x cu. in. displacement. (This is approximate and should be used only when actual torque is not known.)
Cu. In. Displacement
D=B x B x .7854 x S x No. of Cyl.

AMA Horsepower Rating

$$AMA\ H.P. = \frac{B \times B \times No.\ of\ Cyl.}{2.5}$$

D=Cu. in. displacement.
B=Cylinder bore.
S=Cylinder stroke.

TIRE TABLE

(Tire and Rim Association, Inc.)

Balloon Tires

Size	Capacity (lb.)	Size	Capacity (lb.)
5.50/20	1225	9.75/15	3175
6.00/20	1400	9.75/18	3600
6.50/18	1550	9.75/20	3900
6.50/20	1700	9.75/22	4200
7.00/18	1800	9.75/24	4400
7.00/20	1950	10.50/20	4700
7.50/18	2025	10.50/22	5000
7.50/20	2200	10.50/24	5200
7.50/24	2500	11.25/20	5450
8.25/18	2450	11.25/22	5800
8.25/20	2650	11.25/24	6050
8.25/22	2850	12.00/20	6250
8.25/24	3025	12.00/24	6950
9.00/15	2650	12.75/20	7200
9.00/18	3000	12.75/24	8000
9.00/20	3250	13.50/20	8200
9.00/22	3500	13.50/24	9100
9.00/24	3650		

High Pressure Tires

Size	Capacity (lb.)	Size	Capacity (lb.)
30x5	1700	34x7	2800
34x5	1950	38x7	3200
32x6 (8-ply)	1950	36x8	3600
		40x8	4000
32x6 (10-ply)	2200	38x9	4500
		42x9	5000
36x6	2500	40x10	5500
32x7	2550	44x10	6000

Line Number	MAKE AND MODEL	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	Maximum Tire Size Furnished	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Spd's	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES SERVICE: Make	Location	Type	Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimension (Std. W. B.)	FRAME: Side Rail Dimensions	Type
1	Autocar.....(1) A	.....	1095	139	179	13500	4790	6.50/20D	8.25/20	Her JXB	6–3⅝x4½	263	5.8	164	73–2300	7–2½x10	Y	Cla 185F	4	Tim 54412	SF	H	** 6.8	Tim 31007	L4IHV	308	470	c	TD	62½	7½x2¾x⅞	T
2	.....B	.....	1480	139	179	16000	5150	6.50/20D	8.25/20	Her JXC	6–3½x4¼	282	5.8	176	78–2300	7–2½x10	Y	Cla 200VO	5	Tim 56410	SF	H	** 6.8	Tim 31008	L4IHV	358	578	c	TD	62½	8x2¾x¼	T
3	.....(N) RM	.....	2280	164	212	18500	6715	7.50/20D	9.00/20	Own 315	6–3¾x4¾	315	5.5	210	78–2400	7–3x12⅝	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	84	8x2¾x¼	T
4	.....(N) RL	.....	2595	164	212	20000	6895	8.25/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	84	8½x3x½	T
5	.....(N) D	.....	3600	164	182	25000	7565	9.00/20D	9.75/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own DF5	5	Own DF	2F	H	6.49–7.89	Tim 35000	LO4IDV	466	694	c	2I	84	8½x3x½	T
6	.....(N) DF	.....	4200	164	182	26500	8445	9.75/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14⅜	Y	Own DF5	5	Own DFA	2F	H	6.49–7.89	Tim 35100	LO4IDV	466	694	c	2I	84	8½x3x½	T
7	.....(N) N	.....	4500	164	218	28000	8705	9.75/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14⅜	Y	Own DF5	5	Own N	2F	H	7.20–8.57	Tim 35100	LO4IDV	580	930	c	FD	84	9x3x¼	T
8	.....(N) NFS	.....	5600	195	195	26000	10380	10.50/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14⅜	Y	Own TF5	5	Own TF	2F	H	7.20–8.57	Tim 26450	LO4IDV	580	930	c	FD	119½	9x3x¼	T
9	.....(N) NF	.....	5100	164	218	29500	9735	10.50/20D	10.50/24	Own 404	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own TF5	5	Own TF	2F	H	7.20–8.57	Tim 35100	LO4IDV	580	930	c	FD	84	10½x3x¼	T
10	.....(N) CF	.....	6000	172	203	30000	10300	36x7	36x7	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own TF4	4	Own C	2F	H	7.20–9.43	Own SCH	O2IMV	502	930	c	FD	88½	9x3x¼	T
11	.....(N) TS	.....	6600	204	204	29740	11404	10.50/24D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own TF4	4	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	659	1051	c	FD	129	10½x3x⅞	T
12	.....(N) T	.....	5850	182	218	36000	10485	10.50/20D	11.25/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own TF5	5	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	631	930	c	FD	102	10½x3x¼	T
13	.....(T) RMT	.....	2180	142	164	28000	6835	8.25/20D	9.00/20	Own 315	6–3¾x4¾	315	5.5	210	78–2400	7–3x12⅝	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	62	8x2¾x¼	T
14	.....(T) 1TR	.....	2595	142	164	32000	6875	8.25/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	62	8½x3x½	T
15	.....(T) 2TR	.....	4100	142	164	36000	7805	9.00/20D	9.75/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14⅜	Y	Own DF5	5	Own DFA	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	62	8½x3x½	T
16	.....(T) 3TR	.....	4800	148	164	40000	8375	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own DF5	5	Own N	2F	H	7.20–8.57	Tim 32502	LO4IDV	567	831	c	FD	68	8½x3x½	T
17	.....(T) 4TR	.....	4950	148	164	45000	9265	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own TF5	5	Own TF	2F	H	7.20–8.57	Tim 35000	LO4IDV	567	831	c	FD	68	8½x3x½	T
18	.....(T) 5TR	.....	5700	148	164	50000	9655	10.50/20D	10.50/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own TG	5	Own TG	2F	H	7.20–8.68	Tim 35100	TO4IA	580	930	c	FD	68	9x3x¼	T
19	.....(d) RLD	.....	2460	148	148	16000	6785	8.25/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own RL5	5	Own RL	2F	H	6.49–7.89	Tim 32502	LO4IDV	466	694	c	2I	68	8½x3x½	T
20	.....(d) DP	.....	3750	148	164	18000	7635	9.00/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own DFA	5	Own DFA	2F	H	7.13–7.89	Tim 35000	LO4IDV	567	831	c	2I	68	8½x3x½	T
21	.....(d) DH	.....	4550	148	164	23000	8535	9.75/20D	9.00/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own DF5	5	Own DF	2F	H	7.20–8.57	Tim 35100	LO4IDV	580	930	c	2I	68	9x3x¼	T
22	.....(d) S	.....	5750	170	170	30000	10025	10.50/20D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	OwTF4-A3	12	Own CGA	2F	H	7.69–8.52	Tim 26452	LO4IDV	580	930	c	FD	90	10½x3x¼	T
23	.....(d) C	.....	6650	170	170	44000	11385	10.50/24D	11.25/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	OwTF4-A3	12	Tim 79733	2F	H	8.59–10.12	Tim 27452	LT4IDV	688	1050	c	FD	90	10½x3x⅞	T
24	.....(c.o.e.) UA	.....	1095	84	124	13500	4740	6.50/20D	8.25/20	Her JXB	6–3⅝x4¼	263	5.8	164	73–2300	7–2½x10	Y	Cla 185F	4	Tim 54412	SF	H	** 6.8	Tim 31008	L4IHV	358	578	c	TD	62	7½x2¾x⅞	T
25	.....(c.o.e.) UB	.....	1545	84	124	16000	5290	7.00/20D	8.25/20	Her JXC	6–3½x4¼	282	5.8	176	78–2300	7–2½x10	Y	Cla 200VO	5	Tim 56410	SF	H	** 6.8	Tim 31008	L4IHV	358	578	c	TD	62	8x2¾x¼	T
26	e.u.s. (N) UD	.....	3800	109	145	25000	7950	9.00/20D	9.75/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own UDF5	5	Own DF	2F	H	6.49–7.89	Tim 35100	LO4IDV	466	694	c	2I	84½	8x3x¼	T
27	e.u.s. (N) UDF	.....	4550	109	145	26500	8540	9.75/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14⅜	Y	Own UDF5	5	Own C & N	2F	H	7.20–8.57	Tim 26452	LO4IDV	580	930	c	2I	84½	8x3x¼	T
28	e.u.s. (N) UN	.....	5000	109	163	28000	9070	9.75/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14⅜	Y	Own UDF5	5	Own TF	2F	H	7.20–8.57	Tim 26452	LO4IDV	580	930	c	FD	84½	8x3x¼	T
29	e.u.s. (N) UNFS	.....	5600	145	145	27000	9585	10.50/20D	10.50/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14⅜	Y	Own UDF5	5	Own TF	2F	H	7.20–8.57	Tim 26452	B4IMV	637	930	c	FD	120½	9x3x¼	T
30	e.u.s. (N) UNF	.....	5400	128	163	29500	9780	10.50/20D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own UDF4	4	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	631	930	c	FD	103¼	9x3x¼	T
31	e.u.s. (N) UTS	.....	5600	145	145	29900	10922	10.50/24D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own UTF5	5	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	631	930	c	FD	120¼	10½x3x¼	T
32	e.u.s. (N) UT	.....	5900	128	163	36000	10440	10.50/20D	10.50/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own UTF4	4	Own TG	2F	H	7.20–8.68	Tim 26452	TO4IA	631	930	c	FD	103¼	9x3x¼	T
33	e.u.s. (T) 1UTR	.....	3850	98	109	32000	7140	8.25/20D	9.75/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own UDF5	5	Own DF	2F	H	6.49–7.89	Tim 35000	LO4IDV	466	694	c	2I	73¼	8x3x¼	T
34	e.u.s. (T) 2UTR	.....	4650	98	109	36000	8750	9.00/20D	9.75/20	Own 404	6–4¼x4¾	404	5.5	295	97–2200	7–3x14⅜	Y	Own UDF5	5	Own C	2F	H	7.20–9.43	Tim 35000	LO4IDV	567	831	c	2I	73¼	8x3x¼	T
35	e.u.s. (T) 3UTR	.....	5200	98	109	40000	8900	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own UDF5	5	Own C	2F	H	7.20–9.43	Tim 35000	LO4IDV	567	831	c	FD	73¼	8x3x¼	T
36	e.u.s. (T) 4UTR	.....	5450	98	109	45000	9200	9.75/20D	10.50/20	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Own UTF5	5	Own C	2F	H	7.20–9 43	Tim 35000	LO4IDV	580	930	c	FD	73¼	8x3x¼	T
37	e.u.s. (T) 5UTR	.....	5900	98	109	50000	9790	10 50/20D	10.50/24	Own 501	6–4½x5¼	501	5.5	375	123–2200	7–3¼x14	Y	Own UTF4	4	Own CG	2F	H	7.69–8.52	Tim 26452	TO4IA	631	930	c	FD	73¼	8x3x¼	T
38	e.u.s. (d) UDP	.....	4400	100	100	23000	8410	9.00/20D	9.75/20	Own 358	6–4x4¾	358	5.5	250	85–2300	7–3x12⅝	Y	Own UTF5	5	Own CG	2F	H	7.20–9.43	Tim 26452	LO4IDV	580	930	c	2I	75¼	8x3x¼	T
39	e.u.s. (d) US	.....	5850	120	120	31000	10240	10.50/20D	10.50/24	Own 453	6–4½x4¾	453	5.5	333	108–2200	7–3x14⅜	Y	Fu	5	Own CGA	2F	H	7.69–8.52	Tim 26452	LO4IDV	580	930	c	FD	95¼	9x3x¼	T
40	Available....P-105	¾–1	845	Op	Op	8500	2425	6.50/18S	6.50/20	Wau FC	4–3¼x4	133	5.8	98	36–2800	3–2¼x4	N	WG T9	4	Tim 53508	SF	H	** 6.6	Tim 30000H	L4IH	266	427	a	TX	Opt	4x2x¼	
41	.....P-106	1–1½	940	Op	Op	8500	2750	6.50/18S	6.50/20	Wau ZKA	6–3⅜x4¼	221	5.6	154	66–2900	4–2⅜x5⅝	N	WG T9	4	Tim 53508	SF	H	** 6.6	Tim 30000H	L4IH	266	427	a	TX	Opt	4x2x¼	D
42	.....X-110	1½	1125	Op	Op	11500	3600	6.50/20D	7.50/20	Wau ZKA	6–3⅜x4¼	221	5.6	154	66–2900	4–2⅜x5⅝	N	WG T9	4	Tim 53508	SF	H	** 6.6	Tim 30000H	L4IH	266	427	a	TX	Opt	8x2½x¼	DT
43	.....X-120	1½–2	1370	Op	Op	12500	4000	6.50/20D	7.50/20	Wau BM	6–3⅝x4¼	263	5.4	165	78–3100	7–2⅝x10¼	N	WG T9	4	Tim 53308	SF	H	** 6.6	Tim 30000H	L4IH	303	503	a	TX	Opt	10x2½x¼	T
44	.....X-170	2½	1780	Op	Op	15000	4800	7.50/20D	8.25/20	Wau BM	6–3⅝x4¼	263	5.4	165	78–3100	7–2⅝x10¼	N	WG T9	4	Tim 53308	SF	H	** 6.6	Tim 31000H	L4IH	330	582	a	TX	Opt	10x2½x¼	T
45	.....X-210	2½	1890	Op	Op	15000	4850	7.50/20D	8.25/20	Wau BK	6–3¾x4¼	282	5.4	188	85–3200	7–2⅝x10¼	Y	Fu 5-A-330	5	Tim 54411	SF	H	** 6.6	Tim 31000H	L4IH	330	582	a	TX	Opt	10x2½x¼	T
46	.....X-240	3–3½	2175	Op	Op	19000	5500	8.25/20D	9.00/20	Wau BK	6–3¾x4¼	282	5.4	188	85–3200	7–2⅝x10¼	Y	Fu 5-A-330	5	Tim 56410	SF	H	** 7.4	Tim 32502H	L4IH	330	582	a	TX	Opt	10x2½x¼	T
47	.....X-300	4	3025	Op	Op	20700	7000	9.00/20D	9.75/20	Wau 6-110	6–4x4¾	358	5.5	250	125–2600	7–3x12⅝	Y	Fu 5-A-330	5	Tim 58205	SF	H	** 7.8	Tim 33000H	L4IH	376	660	a	TX	Opt	12x2½x¼	T
48	.....X-400	5	4125	Op	Op	26500	8200	9.75/20D	9.75/20	Wau 6-125	6–4¾x5½	462	5.0	324	125–2600	7–3x13⅝	Y	Fu 5-A-620	5	Tim 65725H	WF	R	** 8.50	Tim 35000H	L4IHV	462	768	a	TD	Opt	14x3x⅞	T
49	Biederman (2)...10	1	1095	145	157	10000	3100	7.00/20S	8.25/20S	Con 25A	6–3⅝x4	215	4.9	142	70–2800	4–2¾x6¾	Y	WG T9	4	Cla B373	BF	R	5.1–6.4	Cla F212	L4IH	312	424	G	TX	54	7x3x⅞	T
50	20	1½	1295	157	180	11400	3800	7.00/20D	8.25/20	Wau 6BL	6–3½x4¼	245	5.2	162	75–2800	7–2⅝x10¼	Y	WG T9	4	Cla B373	BF	R	5.1–6.4	Cla F212	L4IH	312	424	G	TX	82	7x3x⅞	T
51	30	2	1560	166	190	14000	4800	7.50/20D	9.00/20	Wau 6BL	6–3½x4¼	245	5.2	162	75–2800	7–2⅝x10¼	Y	Fu 5-A-29	4	Cla B373	BF	R	5.6–6.4	Cla F308	L4IH	458	556	G	TX	82	7½x3x¼	T
52	40	2½	1750	180	200	15000	5500	8.25/20D	9.00/20	Wau 6BK	6–3¾x4¼	282	5.0	190	84–2800	7–2⅝x10¼	Y	Fu 5-A-29	5	Cla B613	BF	R	5.6–6.4	Cla F308	L4IH	458	556	G	TX	105	7½x3x¼	T
53	50	3	2205	180	200	16000	6800	8.25/20D	9.00/20	Con E601	6–3¾x4¼	318	4.6	205	88–2600	7–2⅝x12⅜	Y	Fu 5-A-29	5	Cla B805	BF	R	6.4–7.2	Cla F308	L4IH	458	556	G	TX	105	8x3x¼	T
54	60	3½	2750	180	210	20000	7100	9.00/20D	10.50/20	Con E602	6–4¼x4½	360	4.5	240	92–2600	7–2⅝x12⅜	Y	Fu 5-A-38	5	Cla B805	BF	R	5.7–7.2	Cla F318	L4IH	490	660	G	PX	105	8x3x¼	T
55	70	5	3600	157	210	24000	7530	9.75/20D	10.50/20	HerWXC3	6–4¼x4½	383	4.7	265	98–2500	7–2⅝x12⅜	Y	Fu 5-A-38	5	Wis 1237	2F	R	7.7–9.2	Tim 35100	Ws4IA	616	836	G	PX	76	9x3x¼	T
56	80	7½	4200	187	210	30000	8500	10.50/20D	12.00/22	Her RX8	6–4½x5¼	500	4.9	330	110–2200	7–3x12⅝		Fu 5-A-53		Wis 1737	2F	R	6.0–9.2	Tim 26450	Ws4IA	616	836	G	PX	103	10x3x⅞	T
57	Brockway.....78	1½–2	895	138	164	.....	3965	6.00/20D	32x6	Con 24B	6–3¼x4½	210	5.7	154	71–3100	4–2¼x6	N	WG T9	4	Tim 53521H	SF	H	5.66–6.6	Tim 30000H	L4IH	255	402	a	TX	65⅄	7½x3x⅞	T
58	83	1½–2½	1195	138	170	.....	4100	6.50/20D	7.50/20	Con 25B	6–3½x4¾	244	5.7	171	84–3250	4–2⅜x6¾	N	WG T9	4	Tim 53521H	SF	H	5.66–6.6	Tim 30000H	L4IHV	255	402	a	TX	65⅄	7½x3x⅞	T
59	87	2–2½	1240	144	176	.....	4435	6.50/20D	7.50/20	Con 28B	6–3⅝x4¾	248	5.7	170	78–3100	7–2⅝x10½	N	WG T9	4	Tim 53521H	SF	H	5.66–6.6	Tim 30000H	L4IHV	255	402	a	TX	71⅄	7½x3x⅞	T
60	88	1½–3	1290	150	176	.....	4500	6.50/20D	7.50/20	Con 25B	6–3½x4¾	244	5.7	171	84–3250	4–2⅜x6⅞	N	WG T9	4	Tim 53307H	SF	H	6.2 –6.8	Tim 30000H	L4IHV	310	477	a	TX	71⅄	7½x3x⅞	T
61	.....90X	2½–3	1470	150	176	.....	4635	7.00/20D	34x7	Con 28B	6–3⅝x4¾	248	5.3	170	78–3100	7–2⅝x10½	N	WG T9	4	Tim 53307H	SF	H	5.83–6.8	Tim 31000H	L4IHV	302	528	a	TX	77⅄	7½x3x⅞	T
62	92	1½–4	1560	150	188	.....	4700	7.00/20D	8.25/20	Con 25B	6–3½x4¾	244	5.7	171	84–3250	4–2⅜x6⅞	N	WG T9	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
63	94	1½–5	1850	156	188	.....	5050	7.50/20D	8.25/20	Con 25B	6–3½x4¾	244	5.7	171	84–3250	4–2⅜x6⅞	N	BL B341	4	Tim 56410H	SF	H	6.16–7.4	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
64	96	2½–3	1740	156	176	.....	5150	7.00/20D	8.25/20	Con 29B	6–3¾x4½	288	5.4	192	78–2650	7–2⅝x13	N	BL B341	4	Tim 53307H	SF	H	5.83–6.8	Tim 31000H	L4IHV	302	528	a	CD	83⅄	8x3x¼	T
65	110	3	1900	156	188	.....	5490	7.50/20D	8.25/20	Con 29B	6–3¾x4½	288	5.4	192	78–2650	7–2⅝x13	N	BL B341	4	Tim 53307H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
66	.....125X	3	2075	164	188	.....	5570	7.50/20D	8.25/20	Con 31B	6–3¾x4½	288	5.4	192	78–2650	7–2⅝x13	N	BL B341	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
67	130	3–4	2245	164	206	.....	6270	8.25/20D	9.00/20	Con 29B	6–3¾x4½	318	5.5	214	86–2600	7–2⅝x13	N	BL B341	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	83⅄	8x3x¼	T
68	145	3–4	2385	176	206	.....	6390	8.25/20D	9.00/20	Con 31B	6–3¾x4½	288	5.4	192	78–2650	7–2⅝x13	N	BL B341	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	329	580	a	CD	91⅄	8x3x¼	T
69	.....150X-4	3½–4	2680	176	206	.....	6520	8.25/20D	9.00/20	Con 31B	6–3¾x4½	318	5.5	214	86–2600	7–2⅝x13	N	BL B341	4	Tim 56410H	SF	R	6.16–7.4	Tim 31000H	L4IHV	329	580	a	CD	91⅄	8x3x¼	T
70	.....150X-5	3½–4	2710	176	206	.....	6570	8.25/20D	9.00/20	Con 32B	6–4½x4½	361	5.4	252	95–2500	7–2⅝x13	N	BL B341	4	Tim 56410H	SF	R	6.16–7.4	Tim 32505H	L4IHV	329	580	a	CD	103⅄	8x3x¼	T
																	Y	BL 3241	5	Tim 56410H	SF	R	5.71–7.4	Tim 32505H	L4IHV	329	580	a	CD	103⅄	8x3x¼	T
71	120	2½–3	2260	156	188	.....	5800	7.50/20D	8.25/20	Con 30B	6–4x4½	311	4.2	203	85–2500	7–2¾x13	N	BL 314	4	Tim 54300H	SF	H	4.86–5.83	Tim 32505H	L4IH	329	580	a	CD	69	8x3x¼	T
72	140	3–3½	2850	156	206	.....	6385	8.25/20D	9.00/20	Con 30B	6–4x4½	311	4.2	203	85–2500	7–2¾x13	Y	Wis 5000L	2F	R	6.00–7.35	Tim 32505H	L4IHV	329	580	a	CD	69	8x3x¼	T
73	141	3½–4	3355	170	200	.....	7450	9.00/20D	9.75/22	Con 30B	6–4x4½	311	4.2	203	85–2500	7–2¾x13	Y	Wis 72000	2F	R	6.28–8.00	Shu 15685B1	L4IHV	396	663	a	CD	83	8x3x¼	T
74	.....130-PS	4–4½	2525	164	206	.....	6250	34x7D	9.00/20	Con 29-B	6–3¾x4½	288	5.4	192	78–2650	7–2⅝x13	N	Fu 5-A-43	5	Tim 56200H	SF	R	6.16–7.4	Tim 32505H	L4IHV	329	580	a	CD	91⅄	8x3x¼	T
75	.....160X	4–5	3295	153	219	.....	7350	9.00/20D	9.75/22	Con 32B	6–4½x4½	361	5.4	252	95–2500	7–2⅝x13	Y	Fu 5-A-43	5	Tim 58205H	SF	R	6.16–7.8	Shu 15685B1	L4IHV	396	663	a	CD	83⅄	8½x3x⅞	T
76	.....170X	4–5	3640	153	219	.....	7960	9.00/20D	9.75/22	Con 33B	6–4½x4½	381	4.4	276	106–2600	7–2¾x13	Y	Fu 5-A-62	5	Wis 72000L	2F	R	6.00–8.40	Shu 15685B1	L4IHV	396	663	a	CD	83⅄	8½x3x⅞	T
77	.....165X	5–7	3795	153	219	.....	8150	9.75/20D	10.50/22	Con 32B	6–4½x4½	361	5.4	252	95–2500	7–2⅝x13	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	396	663	a	CD	83⅄	8½x3x⅞	T
78	.....175X	5–7½	4290	153	219	.....	8550	9.00/20D	10.50/22	Con 34B	6–4½x4½	427	4.2	308	118–2600	7–2¾x13	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	484	772	a	CD	83⅄	8½x3x⅞	T
79	.....195X	5–7½	4230	153	219	.....	8630	9.75/20D	10.50/22	Con 33B	6–4½x4½	381	4.4	276	106–2600	7–2¾x13	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	484	772	a	CD	83⅄	8½x3x⅞	T
80	.....220X	7½–10	4930	153	219	.....	9050	10.50/20D	11.25/24	Con 34B	6–4½x4½	427	4.2	308	118–2600	7–2¾x13	Y	Fu 5-A-62	5	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	484	772	a	CD	83⅄	8½x3x⅞	T
81	.....240X	6–7½	5130	153	219	.....	8590	9.75/20D	10.50/24	Con 35B	6–4½x5¼	501	4.3	364	135–2200	7–2¾x13	Y	Fu 5-A-62	5	Wis 1757H	2F	R	6.42–8.5	Shu 15685B1	L4IHV	531	899	a	CD	83⅄	8½x3x⅞	T
82	.....260X	10	6030	195	219	.....	9720	10.50/20D	11.25/24	Con 35B	6–4½x5¼	501	4.3	364	135–2200	7–2¾x13	Y	Wis 1337BH	2F	R	5.63–8.59	Shu 15685B1	L4IHV	484	772	a	CD	83⅄	8½x3x⅞	T
83	.....

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Line Number	MAKE AND MODEL	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	Maximum Tire Size Furnished	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	Forward Spd's	REAR AXLE: Make and Model	Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE: Make and Model	BRAKES: SERVICE: Make Location Type Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimension (Std. W. B.)	FRAME: Side Rail Dimensions	Type
1	Fageol.... 250MK	2½–4	2540	188	201	19500	6175	8.25/20D	9.00/20	Wau 6MK	6–4½x4¾	381	4.4	240	82–2200	7–2⅝x12½	N	BL 3341	4	Tim 56410H	BF	H	4.44– 7.4	Tim 33020H	L4IHV	355	578	G	TX	102¼	8x3x¼	T
2	(Cont'd)..250RA	2½–4	2700	188	201	20700	6400	8.25/20D	9.00/20	Wau 6MK	6–4½x4¾	381	4.4	240	82–2200	7–2⅝x12½	N	BL 3341	4	Tim 58200H	BF	H	5.56– 7.8	Tim 33020H	L4IHV	398	659	G	TX	103¼	8x3x¼	T
3	.....300HP	3–5	3275	188	201	22000	7150	9.00/20D	9.75/20	Wau 6–110	6–4x4¾	358	5.2	254	110–2800	7–2⅞x12½	Y	BL 5241	4	Tim 58200H	BF	R	5.56– 7.8	Tim 35020H	L4IHV	398	659	G	FD	103¼	8x3x¼	T
4	.....300RA	3–5	3560	188	201	26300	7650	9.00 20D	9.75 20	Wau 6–110	6–4x4¾	358	5.2	254	110–2800	7–2⅞x12½	Y	BL 5241	4	Tim 65725H	WF	R	6.0–9.25	Tim 35020H	L4IHV	484	768	G	FD	103¼	8x3x¼	T
5	.....370HP	5–6	4950	202	218	26300	9150	9.75/20D	10.50/20	Wau 6–125	6–4⅜x5½	462	5.2	324	125–2600	7–3x13⅜	Y	BL 5341	4	Tim 65725H	WF	R	6.0–9.25	Tim 35000H	L4IHV	484	768	G	FD	103¼	8x3x¼	T
6	.....370RA	5–6	5200	202	218	32000	9400	9.75/20D	10.50/20	Wau 6–125	6–4⅜x5½	462	5.2	324	125–2600	7–3x13⅜	Y	BL 5341	4	Tim66720DH	WF	R	6.0–9.25	Tim 35000H	L4IHV	663	768	G	FD	116¾	10⅜x3⅛x¼	T
7	(D).....370D	5–6	7000	213	229	26300	10250	9.75/20D	10.50/20	Cum HB	6–4½x6	672	17.	500	150–1800	7–4½x16½	Y	BL 7341	4	Tim 65725H	WF	R	6.0–9.25	Tim 26450H	L4IHV	484	768	G	FD	117¾	10⅜x3⅛x¼	T
8	(D).....370RAD	5–6	7250	213	229	32000	10500	9.75/20D	10.50/20	Cum HB	6–4½x6	672	17.	500	150–1800	7–4½x16½	Y	BL 7341	4	Tim66720DH	WF	R	6.0–9.25	Tm 26450H	L4IHV	663	768	G	FD	117¾	10⅜x3⅛x¼	T
9	.....370C	5–6	5200	202	218	30000	10900	9.75/20D	10.50/20	Wau 6–125	6–4⅜x5½	462	5.2	324	125–2600	7–3x13⅜	Y	BL 5341	4	Own	CD	R	6.32–7.59	Tim 35000H	L4IHV	484	768	G	FD	116¾	10⅜x3½x¼	T
10	.....(D) 370DC	5–6	7250	213	229	33000	12200	9.75/20D	10.50/20	Cum HB	6–4½x6	672	17.	500	150–1800	7–4½x16½	Y	BL 7341	4	Own	CD	R	6.32–7.59	Tim 26450H	L4IHV	538	768	G	FD	117¾	10⅜x3½x¼	T
11	Federal.....9	¾–1	695	105	121	7000	2850	6.00/20S	6.00/20	Con C400	4–3⅜x4	143	5.2	97	33–2500	3–1¾x5	N	WG T9	4	Tim 51200H	SF	H	5.14–5.83	Tim 30020H	L4IH	270	388	a	TX	35⅞	6⅛x2⅞x⅜	T
12	10	¾–1½	645	128	152	8500	2950	6.00/20S	6.00/20	Her OOB	4–3¾x4½	199	5.3	127	50–2500	3–2x7	N	WG T9	4	Tim 51200H	SF	H	5.14–5.83	Tim 30020H	L4IH	270	388	a	TX	51⅝	7x2⅛x⅜	T
13	11	¾–1½	655	128	152	8500	2950	6.00/20S	6.00/20	Her QXB3	6–3¼x4½	205	5.2	134	57–2500	7–2½x10	N	WG T9	4	Tim 51200H	SF	H	5.14–5.83	Tim 30020H	L4IH	270	388	a	TX	51⅝	7x2⅛x⅜	T
14	.....11H	1–1½	695	128	164	10000	3500	6.00/20S	7.00/20	Her QXB3	6–3¼x4½	205	5.2	134	57–2500	7–2½x10	N	WG T9	4	Tim 53521H	SF	H	5.66–6.6	Tim 30020H	L4IH	264	402	a	TX	51⅝	7x2⅛x⅜	T
15	15	1½–2½	755	135	194	12500	4230	6.00/20S	7.50/20	Her JXA	6–3⅜x4¼	228	5.3	155	70–2800	7–2½x10	Y	WG T9	4	Tim 53521H	SF	H	5.14–6.2	Tim 30000H	L4IH	264	402	a	TX	51⅝	7x2⅛x⅜	T
16	.....15H	1½–3	995	135	194	13500	4650	6.50/20D	8.25/20	Her JXA	6–3⅜x4¼	228	5.3	155	70–2800	7–2½x10	Y	WG T9	4	Tim 54411H	SF	H	5.83–6.8	Tim 30000H	L4IH	338	528	a	TX	56¾	8½x2⅛x¼	T
17	18	2–3	995	135	194	13000	4340	6.50/20D	8.25/20	Her JXB	6–3⅝x4¼	263	5.4	183	80–2800	7–2½x10	Y	WG T9	4	Tim 53393H	SF	H	5.83–6.8	Tim 30003H	L4IH	338	528	a	TX	56¾	8½x2⅛x¼	T
18	.....18H	2–3½	1180	135	194	14000	4750	7.00/20D	8.25/20	Her JXB	6–3⅝x4¼	263	5.4	183	80–2800	7–2½x10	Y	WG T9	4	Tim 54411H	SF	H	5.83–6.8	Tim 30003H	L4IH	342	578	a	TX	56¾	8½x2⅛x¼	T
19	20	2–3½	1150	135	194	13500	4440	6.50/20D	8.25/20	Her JXB	6–3⅝x4¼	263	5.4	183	80–2800	7–2½x10	Y	WG T9	4	Tim 53397H	SF	H	5.83–6.8	Tim 31000H	L4IHV	313	527	a	TX	56¾	8½x2⅛x¼	T
20	.....20H	2–4	1320	135	194	15000	4650	7.00/20D	9.00/20	Her JXB	6–3⅝x4¼	263	5.4	183	80–2800	7–2½x10	Y	WG T9	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	342	578	a	TX	56¾	8½x2⅛x¼	T
21	25	2½–4	1395	135	194	15000	5220	7.00/20D	9.00/20	Her JXC	6–3¾x4¼	282	5.4	195	85–2800	7–2½x10	Y	Cla 185F	4	Tim 54411H	SF	H	5.83–6.8	Tim 31000H	L4IHV	342	578	a	TX	56¾	8½x2⅛x¼	T
22	.....25H	2½–4½	1565	135	194	17000	5550	7.50/20D	9.00/20	Her JXC	6–3¾x4¼	282	5.4	195	85–2800	7–2½x10	Y	Cla 185F	4	Tim 56411H	SF	H	6.16–7.4	Tim 31000H	L4IHV	386	659	a	TX	56¾	8½x2⅛x¼	T
23	29	3–4½	1850	135	194	18000	5660	7.50/20D	9.00/20	Her JXD	6–4x4¼	320	5.6	225	95–2800	7–2½x10	Y	Cla 200V	5	Tim 56411H	SF	H	6.16–7.4	Tim 32501H	L4IHV	386	659	a	TX	56¾	8½x2⅛x¼	T
24	.....29H	3–5	2050	135	194	20000	6000	8.25/20D	9.00/20	Her JXD	6–4x4¼	320	5.6	225	95–2800	7–2½x10	Y	Cla 200V	5	Tim 58300H	SF	H	6.83–7.8	Tim 32501H	L4IHV	386	659	a	TX	56¾	8½x2⅛x¼	T
♦ 25	40	4–5	2775	157	219	21500	7200	9.00/20D	10.50/20	Wau 6MK	6–4½x4¾	381	6.5	273	98–2400	7–2⅝x12½	Y	Cla 270V	5	Tim 58300H	SF	H	5.57–7.8	Tim 33000H	L4IHV	386	659	a	TX	82	10⅛x3⅛x⅜	T
♦ 26	.....40DR	4–5	2950	157	219	21500	7200	9.00/20D	10.50/20	Wau 6MK	6–4½x4¾	381	6.5	273	98–2400	7–2⅝x12½	Y	Cla 270V	5	Wis 72300H	2F	H	5.61–7.27	Tim 33000H	L4IHV	386	659	a	TX	82	10⅛x3⅛x⅜	T
27	50	5–6	3375	157	219	25000	7900	9.00/20D	10.50/20	Wau 6MZ	6–4¼x4¾	404	6.0	292	105–2400	7–2⅝x12½	Y	Cla 270V	5	Tim 75733H	2F	R	6.85–9.41	Tim 35000H	L4IHV	477	768	a	FD	82	10⅛x3⅛x⅜	T
28	.....50H	5–7½	3855	157	219	28000	8300	9.75/20D	10.50/20	Wau 6MZ	6–4¼x4¾	404	6.0	292	105–2400	7–2⅝x12½	Y	Cla 270V	5	Tim 76736H	2F	R	7.35–10.2	Tim 35000H	L4IHV	477	768	a	FD	82	10⅛x3⅛x⅜	T
29	.....C7-C7W	6–7½	4710	195	249	30000	10000	9.75/20D	10.50/24	Wau 6SRK	6–4⅝x5½	517	4.6	350	115–2200	7–3x13⅜	Y	Cla B710	5	Tim 76736H	w/2f	R	7.35–10.2	Tim 36020H	L4IHV	512	867	a	TD	102	7⅞x3⅛x⅜	P
30	.....C8-C8W	6–7½	5120	195	249	30000	11200	9.75/20D	10.50/24	Wau 6SRK	6–4⅝x5½	517	4.6	350	115–2200	7–3x13⅜	Y	Cla B710	5	Tim 76736W	w/2f	R	7.35–10.2	Tim 36020W	Ws4IA	609	921	a	TD	102	7⅞x3⅛x⅜	P
31	.....C8H	7½	5950	185	249	36000	12500	10.50/24D	11.25/24	Wau 6SRK	6–4⅝x5½	517	4.6	350	115–2200	7–3x13⅜	Y	Cla B710	5	Tim 79733W	2F	R	8.75–11.2	Tim 36020W	Ws4IA	737	1050	a	TD	92	7⅝x3½x⅜	P
32	.....(c.o.e.) 75	1½–2½	960	104	159	12500	4280	6.00/20S	7.50/20	Her JXA	6–3⅜x4¼	228	5.3	155	70–2800	7–2½x10	Y	WG T9	4	Tim 53521H	SF	H	5.14–6.2	Tim 31100H	L4IH	264	402	a	TX	60	8½x2⅛x¼	T
33	.....(c.o.e.) 75H	1½–3	1190	104	159	13500	4700	6.50/20D	8.25/20	Her JXA	6–3⅜x4¼	228	5.3	155	70–2800	7–2½x10	Y	WG T9	4	Tim 54411H	SF	H	5.83–6.8	Tim 31100H	L4IH	338	528	a	TX	60	8½x2⅛x¼	T
34	.....(c.o.e.) 80	2–3½	1295	104	159	13500	4500	6.50/20D	8.25/20	Her JXB	6–3⅝x4¼	263	5.4	183	80–2800	7–2½x10	Y	WG T9	4	Tim 53397H	SF	H	5.83–6.8	Tim 31102H	L4IHV	313	527	a	TX	60	8½x2⅛x¼	T
35	.....(c.o.e.) 80H	2–4	1465	104	159	15000	4900	7.00/20D	9.00/20	Her JXB	6–3⅝x4¼	263	5.4	183	80–2800	7–2½x10	Y	WG T9	4	Tim 54411H	SF	H	5.83–6.8	Tim 31102H	L4IHV	342	578	a	TX	60	8½x2⅛x¼	T
36	.....(c.o.e.) 85	2½–4	1555	104	159	15000	5280	7.00/20D	9.00/20	Her JXC	6–3¾x4¼	282	5.4	195	85–2800	7–2½x10	Y	Cla 185F	4	Tim 54411H	SF	H	5.83–6.8	Tim 31102H	L4IHV	342	578	a	TX	60	8½x2⅛x¼	T
37	.....(c.o.e.) 85H	2½–4½	1725	104	159	17000	5600	7.50/20D	9.00/20	Her JXC	6–3¾x4¼	282	5.4	195	85–2800	7–2½x10	Y	Cla 185F	4	Tim 56411H	SF	H	6.16–7.4	Tim 32502H	L4IHV	342	578	a	TX	60	8½x2⅛x¼	T
38	.....(c.o.e.) 89	3–4½	2000	104	159	18000	5720	7.50/20D	9.00/20	Her JXD	6–4x4¼	320	5.6	225	95–2800	7–2½x10	Y	Cla 200V	5	Tim 56411H	SF	H	6.16–7.4	Tim 32502H	L4IHV	386	659	a	TX	60	8½x2⅛x¼	T
39	.....(c.o.e.) 89H	3–5	2200	104	159	20000	6050	8.25/20D	9.00/20	Her JXD	6–4x4¼	320	5.6	225	95–2800	7–2½x10	Y	Cla 200V	5	Tim 58300H	SF	H	6.83–7.8	Tim 32502H	L4IHV	386	659	a	TX	60	8½x2⅛x¼	T
40	Ford.....(4)..75	1½	513	131	131	.....	3020	6.00/20HS	32x7	Own	8–2.6x3.2	136	6.6	94	60–3500	3–2x5.3	N	Own	4	Own	F8	U	6.67	Own	O4IM	350	489	a	2I	57¾	7x2¾x⅜	C
41	.....(4)..79	1½	523	131	131	.....	3220	6.00/20HS	32x7	Own	8–3¼x3¾	221	6	12	150	85–3800	3–2.4x5.37	N	Own	4	Own	F8	U	5.14–6.67	Own	O4IM	350	489	a	2I	57¾	7x2¾x⅜	C
42	.....(4)..79	1½	548	157	157	.....	3297	6.00/20HS	32x7	Own	8–3¼x3¾	221	6	12	150	85–3800	3–2.4x5.37	N	Own	4	Own	F8	U	5.14–6.67	Own	O4IM	350	489	a	2I	83¼	7x2¾x⅜	C
43	(5)..Commercial	.....	405	112	112	.....	1766	6.00/16S	6.50/16	Own	8–3⅛x3¾	136	6.6	94	60–3500	3–2x5.3	N	Own	3	Own	S¾	U	4.11–4.44	Own	O4IM	186	293	a	4I	38¼	5½x2x.11	C
44	(5).....	.....	415	112	112	.....	1966	6.00/16S	6.50/16	Own	8–3⅛x3¾	221	6	12	150	85–3800	3–2.4x5.37	N	Own	3	Own	S¾	U	3.54–4.11	Own	O4IM	186	293	a	4I	38¼	5½x2x.11	C
45	Gen...(6) (N) T-14	½	410	112	126	.....	2265	6.00/16S	7.00/15S	Own 230	6–3⅜x4⅛	230	6.2	172	86–3500	4–2⅛rx5⅛	N	Own	3	Own	S½	U	**–4.11	Own	O4IH	168	242	c	2I	38¼	5¾x2¼x⅝	C
46	Motors....T-16L	¾–1	535	131	...	.....	3220	6.00/20S	7.50/18S	Own 230	6–3⅜x4⅛	230	6.2	172	86–3500	4–2⅛rx5⅛	N	Own	4	Own	SF	H	4.57–5.67	Own	O4IH	337	477	c	2I	57¾	7x2¾x⅜	C
47	.....T-16	1½–3	535	131	157	.....	3515	6.00/20HS	7.50/20	Own 230	6–3⅜x4⅛	230	6.2	172	86–3500	4–2⅛rx5⅛	N	Own	4	Own	SF	H	5.67–6.20	Own	O4IH	337	477	c	2I	57¾	7x2¾x⅜	T
48	.....T-16H	1½–3½	700	130	174	.....	3555	6.00/20HS	7.50/20	Own 230	6–3⅜x4⅛	230	6.2	172	86–3500	4–2⅛rx5⅛	N	Own	4	Own	SF	H	5.67–6.60	Own	LO4IH	349	477	c	2I	57¾	7x2¾x⅜	T
49	.....T-18	1½–4	895	136	178	.....	4455	30x5HS	7.50/20	Own 239	6–3⅜x4⅝	239	5.1	175	81–3060	4–2⅜x7	Y	Own	4	Own	SF	H	5.67–6.60	Own	LO4IH	351	482	Ca	TX	60	8⅜x¾	T
50	.....T-18H	1½–4½	1045	136	178	.....	4845	6.50/20D	34x7	Own 239	6–3⅜x4⅝	239	5.1	175	81–3090	4–2⅜x7	Y	Own	4	Own	SF	H	5.83–6.80	Own	L4IH	342	533	Ca	TX	60	8⅜x¾	T
51	.....T-23	2–5½	1345	136	196	.....	5235	7.00/20D	34x7	Own 257	6–3⅝x4⅞	257	5.0	190	87–2800	4–2⅜x7	Y	Own	4	Own	SF	H	5.83–6.80	Own	L4IHV	342	533	Ca	TX	60	8⅜x¾	T
52	.....T-23H	2–5	1635	136	196	.....	5540	7.50/20D	9.00/20	Own 257	6–3⅝x4⅞	257	5.0	190	87–2800	4–2⅜x7	Y	Own	4	Own	SF	H	5.63–7.20	Own	L4IHV	386	613	Ca	TX	60	8⅜x¾	T
53	.....T-33	2½–6	1915	136	196	.....	6110	7.50/20D	9.75/20	Own 286	6–3⅞x5⅛	286	4.9	205	90–2600	4–2⅜x7	Y	Own	4	Own	SF	H	5.63–7.20	Own	L4IHV	389	663	a	TX	60	8⅛x3⅛x¼	T
54	.....T-33H	2½–6½	2315	136	196	.....	6655	8.25/20D	10.50/20	Own 286	6–3⅞x5⅛	286	4.9	205	90–2600	4–2⅜x7	Y	Own	4	Own	SF	H	6.43–7.16	Own	L4IHV	480	768	a	TX	60	8⅛x3⅛x¼	T
55	.....T-46	3½–7	2625	136	196	.....	7380	8.25/20D	10.50/20	Own 331	6–3⅜x5	331	4.7	230	94–2500	4–2½x8	Y	Own	5	Own	SF	H	6.43–7.16	Own	L4IHV	528	848	a	TX	60	9⅞x3½x⅝	T
56	.....T-61	4–8	4125	136	196	.....	9045	9.00/20D	11.25/20	Own 400	6–4⅛x5	400	4.7	296	110–2300	4–2.7x8	Y	Own	5	Own	2F	R	7.38–9.41	Own	TW4IA	581	921	a	TX	60	9⅞x3½x⅝	TL
57	.....T-61H	5–10	4495	136	196	.....	9660	9.00/20D	11.25/24	Own 400	6–4½x5	400	4.7	296	110–2300	4–2.7x8	Y	Own	5	Own	2F	R	7.34–9.19	Own	TW4IA	581	921	a	TX	60	9⅞x3½x⅝	TL
58	....(c.o.e.) F-16	1½–3½	645	108	155	.....	3610	6.00/20HS	7.50/20	Own 230	6–3⅜x4⅛	230	6.2	172	86–3500	4–2⅛rx5⅛	N	Own	4	Own	SF	H	5.67–6.20	Own	LO4IH	349	477	c	2I	64	7⅞x2⅛x¼	C
59	....(c.o.e.) F-16H	1½–4	780	108	174	.....	3985	6.00/20HS	7.50/20	Own 230	6–3⅜x4⅛	230	6.2	172	86–3500	4–2⅛rx5⅛	N	Own	4	Own	SF	H	5.67–6.60	Own	LO4IH	349	477	c	2I	64	7⅞x2⅛x¼	T
60	....(c.o.e.) F-18	1½–4½	1025	108	178	.....	4550	30x5HS	7.50/20	Own 239	6–3⅜x4⅝	239	5.1	175	81–3000	4–2⅜x7	Y	Own	4	Own	SF	H	5.67–6.60	Own	LO4IH	351	482	Ca	TX	64	8⅜x¼	T
61	....(c.o.e.) F-18H	1½–4½	1175	108	178	.....	4940	6.50/20D	34x7	Own 239	6–3⅜x4⅝	239	5.1	175	81–3000	4–2⅜x7	Y	Own	4	Own	SF	H	5.83–6.80	Own	L4IH	342	533	Ca	TX	64	8⅜x¼	T
62	....(c.o.e.) F-23	2–5	1505	108	196	.....	5540	7.00/20D	34x7	Own 257	6–3⅛x4⅞	257	5.0	190	87–2800	4–2⅜x7	Y	Own	4	Own	SF	H	5.83–6.80	Own	L4IHV	345	583	a	TX	64	8⅜x¼	T
63	....(c.o.e.) F-23H	2–6	1795	108	196	.....	6035	7.50/20D	9.00/20	Own 257	6–3⅛x4⅞	257	5.0	190	87–2800	4–2⅜x7	Y	Own	4	Own	SF	H	5.63–7.20	Own	L4IHV	389	663	a	TX	64	8⅜x¼	T
64	....(c.o.e.) F-33	2½–6½	2095	108	196	.....	6500	7.50/20D	9.75/20	Own 286	6–3⅜x4⅝	286	4.9	205	90–2600	4–2⅜x7	Y	Own	4	Own	SF	H	5.63–7.20	Own	L4IHV	437	743	a	TX	64	8⅛x3⅛x¼	T
65	....(c.o.e.) F-33H	2½–7	2495	108	196	.....	7035	8.25/20D	10.50/20	Own 286	6–3⅜x4⅝	286	4.9	205	90–2600	4–2⅜x7	Y	Own	4	Own	SF	H	6.43–7.16	Own	L4IHV	528	848	a	TX	64	9⅞x3½x⅝	T
66	....(c.o.e.) F-46	3½–8	2805	108	196	.....	7575	8.25/20D	10.50/20	Own 331	6–3⅜x5	331	4.7	230	94–2500	4–2½x8	Y	Own	5	Own	SF	R	6.43–7.16	Own	L4IHV	511	867	a	TX	64	9⅞x3½x⅝	T
67	....(c.o.e.) F-61	4–10	4305	108	196	.....	9365	9.00/20D	11.25/20	Own 400	6–4⅛x5	400	4.7	296	110–2300	4–2.7x8	Y	Own	5	Own	2F	R	7.38–9.41	Own	TW4IA	581	921	a	TX	64	9⅞x3½x⅝	TL
68	....(c.o.e.) F-61H	5–12	4575	108	196	.....	9900	9.00/20D	11.25/24	Own 400	6–4½x5	400	4.7	296	110–2300	4–2.7x8	Y	Own	5	Own	2F	R	7.34–9.19	Own	TW4IA	581	921	a	TX	64	9⅞x3½x⅝	TL
69	Gramm.....15A	1½–2	565	136	220	9500	3000	6.00/20S	7.00/20	Her QXB3	6–3¼x4½	205	5.5	135	61–3100	7–2½x10	N	WG T9	4	Cla R650	SF	H	5.62–6.28	Cla F182	L4IH	210	352	a	TX	55	7⅞x2⅜x⅜	T
70	.....25A	1½–2	595	136	220	11500	3200	6.00/20S	34x7	Her QXB3	6–3¼x4½	205	5.5	135	61–3100	7–2½x10	N	WG T9	4	Cla R750	SF	H	5.1–6.8	Cla F182	L4IH	240	392	a	TX	55	7⅞x2⅜x⅜	T
71	.....30A	2–3	625	136	220	12000	3300	6.00/20S	34x7	Her JXA	6–3⅜x4¼	228	5.7	154	66–2800	7–2½x10	N	WG T9	4	Cla R750	SF	H	5.1–6.8	Cla F266	L4IH	256	432	a	TX	55	7⅞x2⅜x⅜	T
72	.....40A	2½–3½	745	136	220	13000	3650	6.00/20S	8.25/20	Her JXB	6–3⅝x4¼	263	5.8	168	71–2800	7–2½x10	N	WG T9	4	Tim 53300	SF	H	4.57–6.6	Cla F266	L4IH	276	442	a	TX	55	7⅞x2⅜x⅜	T
73	.....45A	2½–4	845	136	220	14000	4000	6.00/20S	8.25/20	Her JXB	6–3⅝x4¼	263	5.8	168	71–2800	7–2½x10	N	WG T9	4	Tim 54411	SF	H	4.12–6.8	Tim 31000	L4IHV	388	578	a	TX	55	7⅞x2⅜x⅜	T
74	.....50A	3–4	1095	136	220	15000	4600	6.50/20D	8.25/20	Her JXB	6–3⅝x4¼	263	5.8	168	71–2800	7–2½x10	N	WG T9	4	Tim 54411	SF	H	4.12–6.8	Tim 31000	L4IHV	388	578	a	TX	55	10x2¾x⅜	P
75	.....55A	3–4½	1195	136	220	15000	4700	6.50/20D	8.25/20	Her JXC	6–3¾x4¼	282	5.7	182	76–2800	7–2½x10	N	Cla 185F	4	Tim 54411	SF	H	4.12–6.8	Tim 31000	L4IHV	388	578	a	TX	55	10x2¾x⅜	P
76	.....70A	3½–4½	1425	136	220	17000	5200	7.00/20D	9.75/20	Her JXC	6–3¾x4¼	282	5.7	182	76–2800	7–2½x10	N	Cla 200V	5	Tim 56410	SF	H	4.44–7.4	Tim 31000	L4IHV	388	578	a	TX	55	10x2¾x⅜	P
77	.....75A	3½–5	1595	136	220	18000	5300	7.00/20D	9.75/20	Her JXD	6–4x4¼	320	5.7	212	88–2800	7–2½x10	N	Cla 200V	5	Tim 56410	SF	H	4.44–7.4	Tim 31000	L4IHV	388	578	a	TX	55	10x2¾x⅜	P
78	.....85A	4–5½	1795	136	220	20000	5700	7.50/20D	10.50/20	Her JXD	6–4x4¼	320	5.7	212	88–2800	7–2½x10	N	Cla 200V	5	Tim 58200	SF	H	5.25–7.8	Tim 32500	L4IHV	436	660	a	TX	55	10x2¾x⅜	P
79	(D).....DJX40A	2½–3½	1995	136	220	13000	3950	6.00/20S	8.25/20	Her DJXB	6–3¼x4½	260	14.5	178	77–2600	7–3x10	Y	Cla 185F	4	Tim 53300	SF	H	4.57–5.66	Cla 266F	L4IH	277	442	a	TX	58	7⅞x2¾x⅜	P
80	(D).....DJX55A	3–4½	2595	136	220	15000	5000	6.50/20D	8.25/20	Her DJXB	6–3¼x4½	260	14.5	178	77–2600	7–3x10	Y	Cla 185F	4	Tim 54411	SF	H	4.12–6.8	Tim 31000	L4IHV	388	578	a	TX	58	10x2¾x⅜	P
81	(D).....DJX70A	3½–5½	2845	136	220	17000	5500	7.00/20D	9.75/20	Her DJXC	6–3¾x4¼	282	14.5	182	82–2600	7–3x10	Y	Cla 200V	5	Tim 56410	SF	H	4.44–7.4	Tim 31000	L4IHV	388	578	a	TX	58	10x2¾x⅜	P
82	(D).....DJX85A	4–6	3095	136	220	18000	6000	7.50/20D	9.75/20	Her DJXD	6–4x4¼	320	14.5	212	88–2800	7–3x10	Y	Cla 200V	5	Tim 58200	SF	H	5.25–7.8	Tim 32500	L4IHV	436	660	a	TX	58	10x2¾x⅜	P

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Line Number	MAKE AND MODEL	Tonnage Rating	GENERAL (See Keynote) Chassis Price	Standard Wheelbases	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES Standard D-dual rear S-single rear Front and Rear	Maximum Tire Size Furnished	ENGINE DETAILS Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	TRANSMISSION Make and Model	Forward Spd's	REAR AXLE Gear and Type	Drive & Torque	Gear Ratio Range in High	FRONT AXLE Make and Model	BRAKES SERVICE Make Location Type Operat'n	Lining Area	Drum Area	Drum Material	Hand Location Type	C-A Dimensions (Std. W. B.)	Side Rail Dimensions	FRAME Type
1	Kenworth	241A	***	169	228	35000	9000	9.75/20D	10.50/20	HaS 160-1	6—4¼x5½	408	4.4	322	112—2200	4—2¾x10⅜	Y	BL 5341	4 Tim 76736	2F	H 6.02—8.5	Tim 36020N	Ws2IM	596 a	FD	84	8x3½	C
2	(Con't.)	(D) 505	***	168	204	20700	9640	9.00/20D	9.75/20	Cum HB4	4—4⅛x6	448	17.	287	83—1800	5—4½x11½	Y	BL 5341	4 Tim 58206H	SF	H 4.56—7.80	Tim 33000H	L4IH	660 a	TD	84	7½x3¼x¼	C
3		(D) 506	***	168	204	25300	9900	9.00/20D	10.50/20	Cum HB4	4—4⅛x6	448	17.	287	83—1800	5—4½x11½	Y	BL 5341	4 Tim 75736H	2F	H 6.85—9.41	Tim 33000H	L4IH	768 a	TD	84	7½x3¼x¼	C
4		(D) 507	***	168	204	32000	10850	9.75/20D	10.50/20	Cum HB4	4—4⅛x6	448	17.	287	83—1800	5—4½x11½	Y	BL 5341	4 Tim 76736H	2F	H 6.02—9.20	Tim 35100H	L4IH	867 a	TD	84	7½x3¼x¼	C
5		(D) 511	***	187	205	28000	10700	9.00/22D	9.75/22	Cum HB6	6—4⅛x6	672	17.	427	125—1800	7—4½x16½	Y	BL 7341	4 Tim 59000	2F	R 6.04—9.55	Tim 31000	Ws21A	596 a	TD	102	7½x3¼x¼	C
6		(D) 519	***	190	225	26300	10300	9.00/20D	10.50/20	Cum HB6	6—4⅛x6	672	17.	427	125—1800	7—4½x16½	Y	BL 7341	4 Tim 75736	2F	R 6.85—9.41	Tim 35100	Ws21A	842 a	TD	103	7½x3¼x¼	C
7		(D) 521	***	190	225	35000	10750	9.75/22D	10.50/22	Cum HB6	6—4⅛x6	672	17.	427	125—1800	7—4½x16½	Y	BL 7341	4 Tim 76736	2F	H 6.02—9.20	Tim 36000	W84IA	400 596 a	TD	103	7½x3¼x¼	C
8	La France	C3 2—2½	1915	177	207	13000	4900	7.00/20D	8.25/20	Wau 6BK	6—3¾x4¼	282	5.2	188	85—3200	7—2⅝x10¼	N	WG T9	4 Tim 53307H	SF	R 5.83—6.80	Tim 33000H	L4IH	328	616 a	TX	91	10x3½x¼	L
9	Republic	D4 2—2½	2065	177	207	15000	5150	7.00/20D	8.25/20	Wau 6BK	6—3¾x4¼	282	5.2	188	85—3200	7—2⅝x10¼	N	Fu MRU	4 Tim 54411H	SF	R 5.83—6.80	Tim 33000H	L4IHV	338	672 a	TX	91	10x3½x¼	L
10		E4 3—4	2315	177	207	17000	5475	7.50/20D	9.00/20	Wau 6BK	6—3¾x4¼	282	5.2	188	85—3200	7—2⅝x10¼	N	Fu MLU	4 Tim 56410H	SF	R 5.71—7.40	Tim 33000H	L4IHV	338	754 a	TX	91	10x3¼x¼	L
11		F4 3½—4½	2565	177	207	19500	6525	7.50/20D	9.75/20	Wau 6MK	6—4⅛x4¾	381	6.1	252	85—2500	7—2⅝x12½	Y	Fu 5A430	5 Tim 58300H	SF	R 5.57—7.80	Tim 33000H	L4IHV	384	794 a	TX	91	10x3¼x¼	L
12		H6 4—5	3340	177	207	22000	7175	9.00/20D	9.75/20	Wau 6MK	6—4⅛x4¾	381	6.1	252	85—2500	7—2⅝x12½	Y	Fu 5A430	5 Wis 72000L	2F	R 5.61—8.40	Tim 33000H	L4IHV	384	756 a	TX	91	10x3¼x¼	L
13		K1 5—6	5300	195	225	26000	8235	9.75/20D	10.50/20	Wau 6SRL	6—4⅝x5½	462	4.6	302	102—2400	7—3x13⅜	WF	H 6.0—7.75	Tim 35725H	WF	R 6.85—9.4	Tim 35100H	L4IHV	510	990 a	TX	107	9x3¼x¼	L
14		M4 6—7	5745	195	225	32000	8685	9.75/20D	10.50/24	Wau 6-125	6—4⅝x5½	462	5.0	328	125—2400	7—3x13⅜	Y	Fu MRU	4 Tim 76733H	2F	R 6.86—9.2	Tim 35100H	L4IHV	510	1030 a	TX	107	9x3¼x¼	L
15	Le Moon	207 2	1275	140	178	13200	3600	6.50/20S	32x6	Wau 6BL	6—3¾x4¼	245	5.1	165	73—3000	7—2⅝x10¼	N	WG T9	4 Tim 53300H	SF	H 4.85—6.8	Tim 30000H	L4IH	275	545	TX	81	8x3½x¼	T
16	(10)	207 2	1385	163	190	15000	4200	6.50/20D	8.25/20	Wau 6BM	6—3¾x4¼	263	5.1	175	78—3000	7—2⅝x10¼	N	WG T9	4 Tim 54411H	SF	H 5.83—6.80	Tim 31000H	L4IHV	325	755	TX	81	8x3¼x¼	T
17	(10)	407 3—4	2350	163	190	16000	6000	7.00/20D	9.00/20	Wau 6MK	6—4⅛x4¾	381	6.1	252	85—3200	7—2⅝x12½	Y	BL 3341	4 Tim 56205H	SF	H 6.14—7.8	Tim 32502H	L4IHV	385	814	TD	81	9x4½x¼	T
18	(10)	507 4—5	2500	163	190	19500	6000	8.25/20D	9.75/20	Wau 6MK	6—4⅛x4¾	381	6.1	252	85—2500	7—2⅝x12½	Y	BL 3341	4 Tim 58205H	SF	H 6.14—7.8	Tim 32502H	L4IHV	385	814	TD	81	9x4½x¼	T
19		H6 4—5	2700	163	190	19500	6000	8.25/20D	9.75/20	Wau 6-110	6—4¼x4¾	358	5.1	234	110—2800	7—2⅝x12½	Y	BL 3341	4 Tim 59205H	SF	H 6.14—7.8	Tim 32502H	L4IHV	385	814 e	TD	81	9x4½x¼	T
20		K1 5—6	3250	163	190	24000	7000	9.00/20D	9.75/20	Wau 6SRL	6—4⅝x5½	462	5.1	300	102—2400	7—3x13⅜	WF	H 6.0—7.75	Tim 35725H	WF	H 6.85—9.4	Tim 35000H	L4IHV	462	825	TD	81	9x4½x¼	T
21	(10)	607 5—6	3250	163	190	24000	7000	9.00/20D	9.75/20	Wau 6SRL	6—4⅝x5½	462	5.1	300	102—2400	7—3x13⅜	WF	H 6.0—7.75	Tim 35725H	WF	R 6.85—9.4	Tim 35100H	L4IHV	510	990 a	TX	107	9x4½x¼	T
22	(c.o.e.) 1100	Tractor 6500	5745	195	225	32000	8685	9.75/20D	10.50/24	Wau 6-125	6—4⅝x5½	462	5.0	328	125—2400	7—3x13⅜	Y	Fu MRU	4 Tim 76733H	2F	R 6.86—9.2	Tim 35100H	L4IHV	510	1030 a	TX	107	9x4½x¼	T
23	Mack, Jr. (11)2M4A		635	114	120	4500	2880	6.00/16S	6.50/16	Own MR140	4—3⅛x4¾	140	5.4	98	45—2800	3—2¼x4¼	S	WG 84C	3 Own MR45	S⅔	H 4.55—4.90	Own MR2	L41H	198	242 C	TX	384	5½x24x¼	C
24	(11)2M6A		675	114	120	4500	2975	6.00/16S	6.50/16	Own MR209	6—3⅛x4¾	209	5.4	144	72—3000	4—2¼x5⅛	S	WG 86	3 Own MR45	S⅔	H 4.55—4.90	Own MR2	L41HV	213	242 C	TX	384	5½x24x¼	C
25	(11)2M6AS		750	114	120	5000	3180	6.00/16S	7.00/16	Own MR209	6—3⅛x4¾	209	5.4	144	72—3000	4—2¼x5⅛	SF	H 5.28—6.6	Own MR10	SF	H 5.28—6.6	Own MR10	L41H	289	366	TX	55	7½x2½x¾	C
26		10MF	875	108	139	8000	3060	6.00/20S	7.50/20	Own MR209	6—3⅛x4¾	209	5.4	144	72—3000	4—2¼x5⅛	SF	H 5.28—6.6	Own MR11	SF	H 5.28—6.6	Own MR11	L41HV	289	366	TX	55	7½x2½x¾	C
27		11M	945	139	190	11000	3205	6.00/20D	7.50/20	Own MR209	6—3⅛x4¾	209	5.4	144	72—3000	4—2¼x5⅛	SF	H 5.28—6.6	Own MR11	SF	H 5.28—6.6	Own MR11	L41H	289	366	TX	57½	7½x2½x¾	C
28		21M	1435	103	190	13000	4000	6.00/20D	8.25/20	Own MR228	6—3⅝x4¾	228	5.4	150	74—3000	7—2⅝x10¼	SF	H 5.28—6.6	Own MR21	SF	H 5.28—6.6	Own MR21	L41HV	289	366	TX	61	7½x3¼x¼	C
29	(12) 21MT		1225	142	190	14500	4200	6.50/20D	8.25/20	Own MR268	6—3⅝x5	268	5.2	175	85—3000	7—2⅝x10¼	SF	H 5.28—6.6	Own MR31	SF	H 5.28—6.6	Own MR31	L41HV	349	523	TX	60½	7½x3¼x¼	C
30		31M	1345	142	190	14500	4370	6.50/20D	8.25/20	Own MR268	6—3⅝x5	268	5.2	175	85—3000	7—2⅝x10¼	2F	H 6.62—8.21	Own MR31	SF	H 5.28—6.6	Own MR31	L41HV	349	523	TX	60½	7½x3¼x¼	C
31		31MDR	1675	105	190	15000	4200	6.50/20D	8.25/20	Own MR268	6—3⅝x5	268	5.2	175	85—3000	7—2⅝x10¼	SF	H 5.28—6.6	Own MR15	SF	H 5.28—6.6	Own MR31	L41HV	349	523 c	TX	61	7½x3¼x¼	C
32		(12) 31MT																											
33	Mack	(a) EJ	1625	158	194	16000	5350	6.50/20D	8.25/20	Own EJ	6—3⅛x5	288	5.5	190	84—2800	7—2⅝x10¼	N	Fu	5 Tim	SF	H 4.86—6.80	Tim	L41HV	329	650 a	TX	84	8x3¼x¼	T
34		EH	2095	158	194	18000	6000	7.00/20D	9.00/20	Own BG	6—3⅛x5	310	5.4	202	90—3000	7—2⅝x10¼	Y	Fu	5 Tim	SF	H 4.44—7.40	Tim	L41HV	370	686 a	TX	84	8½x3¼x¼	T
35		ER	2950	146	194	20000	7350	8.25/20D	9.75/20	Own BG	6—3⅛x5	310	5.4	202	90—3000	7—2⅝x10¼	Y	Fu	5 Own AB	CD	R 7.57—13.1	Tim	O41MV	441	735 a	TX	84	8½x3¼x¼	T
36		EM	2950	158	194	18000	7350	7.50/20D	9.00/20	Own CU	6—3⅛x5	310	5.4	202	90—3000	7—2⅝x10¼	Y	Own BF	5 Own EM	SF	H 5.43—6.33	Own EM	O41MV	468	750 a	TX	84	8½x3¼x¼	T
37		BF	3200	144	210	20000	8100	8.25/20D	9.75/22	Own CU	6—3⅝x5	354	4.9	237	100—2800	7—2⅝x10¼	Y	Own BF	5 Own BF	CD	R 9.3—13.04	Own BF	O41MV	463	920 a	TX	92½	9½x3¼x¼	T
38		BQ	3450	158	194	23000	9150	8.25/20D	9.75/22	Own CU	6—3⅝x5	354	4.9	237	100—2800	7—2⅝x10¼	Y	Own BF	5 Own FD	2F	H 6.31—8.64	Own FD	O41MV	565	920 a	TX	102½	9½x3¼x¼	T
39		BX	5250	189	225		10925	9.75/22D	11.25/24	Own CF	6—4¼x5½	468	5.0	310	118—2400	7—3x12¼	Y	Own CF	5 Own BX	CD	R 6.0—9.07	Own BX	O41MV	649	976 a	TX	120	9½x3¼x¼	T
40		FH	8000	160	172		13200	10.50/24D	12.00/24	Own CF	6—4¼x5½	468	5.0	310	118—2400	7—3x12¼	Y	Own CF	5 Own FE	CD	R7.48—12.4	Own BQ	O41MV	649	976 a	TX	120	9½x3¼x¼	T
41		BQ	7600	194	230		12500	10.50/24D	11.25/24	Own BQ	6—4¼x5¼	611	4.8	390	125—2200	4—3½x10⅞	Y	Own AK	4 Own BQ	2F	H 7.43—10.0	Own BQ	O41MA	781	1194 a	FX	120	10½x3¼x¼	T
42		AK	7600	186	240		12700	10.50/24D	11.25/24	Own BQ	6—4¼x5¼	611	4.8	390	125—2200	4—3½x10⅞	Y	Own AK	4 Own BQ	2F	H 7.43—10.0	Own AK	O41MA	781	1194 a	FX	120	10½x3¼x¼	T
43		AC	8250	186	240		13423	36x6†D	13.50/24	Own BQ	6—4¼x5¼	611	4.8	390	125—2200	4—3½x10⅞	Y	Own AC	4 Own AC	CD	R 8.95—11.5	Own AK	O41MA	781	1194 a	T	102	8½x3¼x¼	T
44		AP	9000	191	216		14500	36x7†D	13.50/24	Own BQ	6—4¼x5¼	611	4.8	390	125—2200	4—3½x10⅞	Y	Own AC	4 Own AC	CD	R 8.95—11.5	Own AC	O41MA	781	1194 a	T	102	8½x3¼x¼	T
45		EC	3600	117	171	20000	7200	7.50/20D	9.00/20	Own BG	6—3⅝x5	310	5.4	202	90—3000	7—2⅝x10¼	Y	Own BF	5 Own AC	SF	H 5.43—6.33	Own EC	O41MV	468	704 a	TX	93	8½x3¼x¼	T
46	(12) (e.b.s.)	CB	4230	117	171	23000	9150	8.25/20D	9.75/22	Own CU	6—3⅝x5	354	5.9	237	100—2800	7—2⅝x13¾	Y	Own BF	5 Own FD	2F	H 6.31—8.64	Own CB	O41MV	565	920 a	TX	111	9½x3¼x¼	T
47	(12) (e.b.s.)	CJ	6100	135	189		10750	9.75/22D	11.25/24	Own CF	6—4¼x5½	468	5.0	310	118—2400	7—3x12¼	Y	Own CF	5 Own FE	2F	H 6.46—9.00	Own CJ	O41MV	649	976 a	TX	120	9½x3¼x¼	T
48	Moreland	R-170 3—4	1947	168	180	17000	4841	7.50/20D	8.25/20	Her JXCM	6—3⅛x4¼	282	5.3	197	85—2900	7—2¼x10⅜	N	BL 2341	4 Tim 54411H	SF	H	Own	L41H	345	578 a	TD	90½	8x3½x¼	T
49		(D) R-180D 3—4	3380	168	180	18000	5641	8.25/20D	9.00/20	Her DJXC	6—3⅛x4¼	295	5.4	208	83—2600	7—2¼x10⅜	N	BL 2341	4 Tim 56411H	SF	H	Own	L41H	357	659 a	TD	90½	8x3½x¼	T
50		R-190 4—5	3325	180	180	19000	5241	8.25/20D	9.00/20	Her JXDM	6—4¼x4¼	320	5.6	224	95—2900	7—2¼x10⅜	N	Fu 5B330	5 Tim 56411H	SF	H	Own	L41H	357	659 a	TD	102½	8x3½x¼	T
51		(13)E-220 6	3425	180	208	22000	6514	9.00/20D	9.75/20	Her WXC3	6—4¼x4½	353	5.0	265	106—2800	7—2⅝x13¾	N	Fu 5A430	5 Tim 58300H	SF	H	Own	L41H	357	659 a	TD	100⅝	9x4x¼x¼	T
52		(13)E-260 7	3760	180	208	26000	6914	9.00/20D	9.75/20	Her WXC3	6—4¼x4½	353	5.0	265	106—2800	7—2⅝x13¾	N	Fu 5A430	5 Tim 75733H	2F	H	Own	L41H	532	867 a	CD	115	9x4x¼x¼	T
53		(13a)H-340 8	4915	196	208	34000	8614	9.75/20D	9.75/20	Her RXB	6—4¼x5¼	501	4.7	330	110—2200	7—3x13¾	N	BL 5241	4 T&M T18000	2F	H	Own	T41A	532	867 a	CD	115	9x4x¼x¼	T
54		(13b)HC-340 8	5215	196		34000		9.75/20D	9.75/20	Her RXB	6—4¼x5¼	501	4.7	330	110—2200	7—3x13¾	N	BL 5241	4 T&M T18000	CF	R	Own	T41A	532	867 a	CD	116½	11x3¼x¼	T
55		(13c)TC-420 10	7020	208		42000		9.75/20D	9.75/22D	Her HXB	6—5x6	707	4.5	460	148—2000	7—3½x16⅝	N	BL 7341	4 T&M T18000	CF	R	Own	T41A	532	867 a				
56			1800	157	190	15000	5500	7.50/20D	7.50/20	Wau BL	6—3⅛x4¼	245	5.0	165	73—3200	7—2¼x10¼	Y	BL 224	4 Tim 54200H	SF	H 5.83—6.83	Tim 30020H	L41HV	306	575 c	TD	Opt	6x3¼x¼	C
57	Neteo	A 2—4	2400	160	200	20000	6500	8.25/20D	9.00/20	Wau BK	6—3⅝x4¼	295	5.4	208	84—3200	7—2¼x10¼	Y	BL 3341	4 Tim 56330H	SF	H 6.83—5.71	Tim 31000H	L41HV	355	575 c	TD	Opt	6x3¼x¼	C
58		B 3—6	2400	160	200	22000	7300	9.00/20D	9.75/20	Wau MK	6—4¼x4¼	381	4.9	240	85—2500	7—2⅝x12½	Y	BL 334	4 Tim 58200H	SF	H 6.83—7.75	Tim 33000H	L41HV	398	650 c	TD	Opt	7x3½x¼	C
59		C 4—7	3400	157	212	24000	8100	9.75/20D	9.75/20	Wau MZ	6—4¼x4¼	404	6.0	274	90—2400	7—2⅝x12½	Y	BL 334	4 Tim 66720H	WF	R 7.75—8.25	Tim 33000H	L41HV	484	490 c	CD	Opt	9x3½x¼	C
60		E 5—8	4600	157	212	30000	9200	10.50/20D	10.50/20	Lyc AEF	6—3⅝x4¼	420	5.0	300	120—2800	5—2¾x12¾	2F	BL 534	4 Tim 78720	2F	R 8.50—9.25	Tim 35000H	W84A	663	750 c	CD	Opt	9x3½x¼	C
61		J 6—9	4900	168	212	32000	9960	10.50/24D	10.50/24	Wau SRK	6—3⅝x4½	517	4.6	335	110—2300	5—2¾x13⅞	Y	BL 724	4 Tim 78720	2F	R 9.92—10.3	Tim 27450	W84A	757	760 c	CD	Opt	9x3½x¼	C
62		K 7—10																											
63																													
64																													
65																													
66	Plymouth	PT50 Com'l	495	116	116	4000	2400	6.00/16S	6.00/16S	Own	6—3⅝x4½	201	6.7	145	70—3000	4—2¾x5½	N	Own	3 Own	Hy½	H 3.73—4.78	Own	O41H	148	251 C	TX	37½	6x2½x¼	C
67	Reo (2)	(14) 4-50 ½	637	114	120		1973	6.00/16S	6.50/16	Own	4—3⅛x4¾	140	5.4	98	42—2800	3—2¼x4¼	N	WG T84C	3 Spl	Hy½	WG T84C	L41H	198	242 C	TX	384	5½x24x¼	C
68		(14) 6-50 ½	660	114	120		2063	6.00/16S	6.50/16	Own	4—3⅛x4¾	200	5.4	145	70—2800	4—2¼x4¼	N	WG T86	3 Spl	H	WG T86	L41H	213	327 C	TX	384	5½x24x¼	C
69		(14) 6-75 ¾	705	114	120		2121	6.50/16S	7.00/16	Own	4—3⅛x4¾	140	5.4	98	42—2800	3—2¼x4¼	N	WG T84C	3 Spl	H	WG T84C	L41H	213	327 C	TX	384	5½x24x¼	C
70		(14) 6-75 ¾	700	139	166		2030	6.00/20S	7.00/20	Own	4—3⅛x4¾	200	5.4	145	70—2800	4—2¼x4¼	N	WG T86	3 Spl	H	WG T86	L41H	246	366 C	TX	384	5½x24x¼	C
71		1A4-1C4 1—1½	745	139	166		2405	6.00/20S	7.00/20	Own	6—3⅛x4¼	209	5.4	150	74—3000	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41H	289	438 a	TX	57½	7½x2½x¾	C
72		1A4H-1C4H 1—1½	793	139	190		3315	6.00/20S	7.00/20	Own	6—3⅛x4¼	228	5.4	150	73—3000	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41H	289	438 a	TX	57½	7½x2½x¾	C
73		1B4-1D4 1½—2½	1190	105	166		3630	6.00/20S	7.00/20	Own	6—3⅛x4¼	228	5.4	150	73—3000	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41HV	289	438 a	TX	60½	7½x3¼x¼	C
74		1B4H-1D4H 1½—2½	853	139	190		3425	6.00/20S	7.00/20	Own	6—3⅝x4¼	228	5.4	150	73—3000	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41HV	289	438 a	TX	60½	7½x3¼x¼	C
75		2B4-2D4 1½—2½	1099	142	190		3800	6.00/20S	7.00/20	Own	6—3⅝x4¼	228	5.4	150	73—3000	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41HV	289	438 a	TX	60½	7½x3¼x¼	C
76		2H5-2J5 2—3	1308	132	190		4260	6.50/20D	8.25/20	Own	6—3⅝x5	268	5.5	178	81—2800	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41HV	289	438 a	TX	60½	7½x3¼x¼	C
77		2B4M-2D4M 2—3	1491	153	205		4260	6.50/20D	8.25/20	Own	6—3⅝x5	268	5.5	178	83—2800	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41HV	289	438 a	TX	60½	7½x3¼x¼	C
78		3H5(3)3B5-3K5 3½—5	2338	153	205		6470	7.50/20D	9.75/20	Own	6—3⅝x5	309	5.4	204	87—2800	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41HV	289	438 a	TX	60½	7½x3¼x¼	C
79		3H5(3)3B5-3K5(3) 3½—5	2338	153	205		6470	7.50/20D	9.75/20	Own	6—3⅝x5	309	5.4	204	87—2800	7—2¼x10¼	N	Own	4 Own	SF	H 5.28—6.6	Own	L41HV	289	438 a	TX	60½	7½x3¼x¼	C
80		4H6-4J6 4—4½	3133	164	206		7434	10.50/24D	10.50/24	Own	6—4¼x4¾	420	5.2	300	120—2800	5—2¾x12¾	2F	BL 534	4 Tim 78720	2F	R 8.50—9.25	Tim 35000H	W84A	757	760 c	CD	Opt	9x3½x¼	C

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Line Number	MAKE AND MODEL	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES D-dual rear S-single rear Standard Front and Rear	TIRE SIZES Maximum Tire Size Furnished	ENGINE DETAILS Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings Number, Diameter and Length	Governor Standard	TRANSMISSION Make and Model	TRANSMISSION Forward Spd's	REAR AXLE Make and Model	REAR AXLE Gear and Type	REAR AXLE Drive & Torque	REAR AXLE Gear Ratio Range in High	FRONT AXLE Make and Model	BRAKES SERVICE Make Location Type Operat'n	BRAKES SERVICE Lining Area	BRAKES SERVICE Drum Area	BRAKES SERVICE Drum Material	BRAKES Hand Location Type	C-A Dimension (Std. W. B.)	FRAME Side Rail Dimensions	FRAME Type
♦ 1	White.....705A	2–6	1885	136	226	.....	4998	7.50/20D	9.00/20	Own 270	6–3 3/16 x4 1/2	270	5.5	195	83–2800	7–2 5/16 x10.7	Y	Own 28B	4	Own 37C	SF	H	5.14–6.83	Own 22D	L4IHV	368	587	d	TX	60 1/4	7 1/16 x3x 1/4	T
♦ 2	(Con't.)....709	1 1/2–4	2010	136	226	.....	5543	7.50/20D	9.00/20	Own 270	6–3 3/16 x4 1/2	270	5.5	195	83–2800	7–2 5/16 x10.7	Y	Own 28B	4	Own 33C	SF	H	5.22–7.14	Own 22D	L4IHV	465	696	a	TX	60 1/4	7 1/16 x3x 1/4	T
♦ 3	.....709A	3–6	2175	136	226	.....	5657	8.25/20D	9.00/20	Own 270	6–3 3/16 x4 1/2	270	5.5	195	83–2800	7–2 5/16 x10.7	Y	Own 28B	4	Own 33C	SF	H	5.22–7.14	Own 22D	L4IHV	465	696	a	TX	60 1/4	7 1/16 x3x 1/4	T
4	710	2–4 1/2	2290	136	226	.....	5959	7.50/20D	9.00/20	Own 303	6–3 3/16 x4 1/2	303	5.5	215	92–2800	7–2 5/16 x10.7	Y	Own 41B	5	Own 33C	SF	H	5.22–7.14	Own 19D	L4IHV	525	824	a	TX	60 1/4	7 1/16 x3x 1/4	T
♦ 5	.....710A	3–6 1/2	2455	136	226	.....	6075	8.25/20D	9.75/20	Own 303	6–3 3/16 x4 1/2	303	5.5	215	92–2800	7–2 5/16 x10.7	Y	Own 41B	5	Own 33C	SF	H	5.22–7.14	Own 19D	L4IHV	525	824	d	TX	60 1/4	7 1/16 x3x 1/4	T
6	712	3–5	2680	130	226	.....	6500	8.25/20D	9.75/20	Own 318	6–3 7/16 x4 1/2	318	5.5	234	94–2600	7–2 5/16 x10 1/2	Y	Own 41B	5	Own 33C	SF	H	5.22–7.14	Own 19D	L4IHV	525	824	a	TX	60	8x3x 1/4	T
♦ 7	.....712A	4–7	2845	130	226	.....	6600	9.00/20D	9.75/22	Own 318	6–3 7/16 x4 1/2	318	5.5	234	94–2600	7–2 5/16 x10 1/2	Y	Own 41B	5	Own 33C	SF	H	5.22–7.14	Own 19D	L4IHV	525	824	a	TX	84	8x3x 1/4	T
♦ 8	718	3–6	3075	130	226	.....	6830	9.00/20D	9.75/22	Own 318	6–3 7/16 x4 1/2	318	5.5	234	94–2600	7–2 5/16 x10 1/2	Y	Own 41B	5	Own 26C	2F	R	7.23–8.73	Own 16D	L4IHV	492	772	a	TX	60	8x3x 1/4	T
♦ 9	.....718A	4 1/2–8	3295	130	226	.....	7300	9.75/20D	10.50/20	Own 318	6–3 7/16 x4 1/2	318	5.5	234	94–2600	7–2 5/16 x10 1/2	Y	Own 41B	5	Own 26C	2F	R	7.23–8.95	Own 16D	L4IHV	492	772	a	TX	84	8x3x 1/4	T
10	640	.....	6100	180	214	.....	10185	9.00/20D	9.75/20	Own 580	6–4 5/8 x5 3/4	580	4.6	385	130–2300	7–3x15 1/2	Y	Own 10B	5	Own 10C	SF	R	5.22–6.29	Own 6D	O4IA	553	832	a	CI	92 1/2	8 1/16 x3 1/16 x 1/16	T
11	.....640K	.....	6300	180	214	.....	10365	9.00/20D	10.50/20	Own 580	6–4 5/8 x5 3/4	580	4.6	385	130–2300	7–3x15 1/2	Y	Own 10B	5	Own 10C	SF	R	5.22–6.29	Own 9D	O4IA	591	832	a	CI	107	8 1/16 x3 1/16 x 1/16	T
12	.....(c.o.e.) 730	.....	6100	108	180	.....	10940	9.75/20D	9.75/24	Own 505	12–3 3/16 x3 1/2	505	6.2	343	143–2800	7–2 7/16 x13 3/4	Y	Own 26B	4	Own 24C	SF	R	5.22–7.14	Own 20D	O4IA	632	933	a	TD	138	8x3 1/16 x1/4	T
13	720	4 1/2–8	4350	134	212	.....	8200	9.00/20D	10.50/22	Own 396	6–4x5 1/4	396	5.0	270	115–2600	7–2 3/4 x13 1/16	Y	Own 36B	5	Own 43C	2F	R	7.23–8.73	Own 24D	L4IHV	560	875	a	TD	60	8 1/16 x3 1/16 x 1/16	TF
14	.....720T	.....	4350	134	158	.....	8100	9.00/20D	10.50/22	Own 396	6–4x5 1/4	396	5.0	270	115–2600	7–2 3/4 x13 1/16	Y	Own 36B	5	Own 43C	2F	R	7.23–8.73	Own 24D	L4IHV	560	875	a	TD	60	8x3x 1/4	T
15	.....722X	10	6675	212	232	.....	11000	10.50/24D	10.50/24	Own 460	6–4 7/16 x5 1/4	460	5.0	320	123–2400	7–2 3/4 x13 1/16	Y	Own 36BE	4	Own 45C	2F	R	6.67–9.50	Own 9D	O4IA	633	1050	a	TX	138	8 1/16 x3 1/16 x 3/16	T
16	941	.....	6550	157	214	.....	10460	9.75/20D	10.50/20	Own 580	6–4 5/8 x5 3/4	580	4.6	385	130–2300	7–3x15 1/2	Y	Own 10B	5	Own 2C	2F	R	5.76–10.0	Own 9D	O4IA	633	996	a	CI	91 1/4	8 1/16 x3 1/16 x 1/16	T
17	.....(18)..641K	.....	6750	157	214	.....	10800	9.75/20D	10.50/24	Own 580	6–4 5/8 x5 3/4	580	4.6	385	130–2300	7–3x15 1/2	Y	Own 10B	5	Own 2C	2F	R	5.76–10.0	Own 9D	O4IA	633	996	a	CI	107	8 1/16 x3 1/16 x 1/16	T
♦ 18	.....(c.o.e.) 731	.....	6900	108	180	.....	11360	10.50/20D	11.25/22	Own 505	12–3 3/16 x3 1/2	505	6.2	343	143–2800	7–2 7/16 x13 3/4	Y	Own 24BA	5	Own 45C	2F	R	6.67–9.50	Own 20D	O4IA	632	1050	a	TD	138	8x3 1/16 x1/4	T
19	722	5–9 1/2	5350	134	212	.....	9300	9.75/20D	11.25/22	Own 460	6–4 7/16 x5 1/4	460	5.0	320	123–2400	7–2 3/4 x13 1/16	Y	Own 36B	5	Own 45C	2F	R	6.67–9.50	Own 6D	O4IA	632	1050	a	TD	60	8 1/16 x3 1/16 x 3/16	TF
20	642	.....	6850	157	214	.....	11335	9.75/24D	10.50/24	Own 580	6–4 5/8 x5 3/4	580	4.6	385	130–2300	7–3x15 1/2	Y	Own 10B	5	Own 13C	2F	R	6.72–11.6	Own 9D	O4IA	623	1044	a	CI	91 3/4	8 1/16 x3 1/16 x 1/16	C
21	643	.....	7050	157	214	.....	11665	10.50/24D	11.25/24	Own 580	6–4 5/8 x5 3/4	580	4.6	385	130–2300	7–3x15 1/2	Y	Own 10B	5	Own 13C	2F	R	6.72–11.6	Own 9D	O4IA	623	1044	a	CI	91 3/4	8 1/16 x3 1/16 x 3/16	C
22	691	.....	7350	129	129	.....	12200	10.50/24D	11.25/24	Own 580	6–4 5/8 x5 3/4	580	4.6	385	130–2300	7–3x15 1/2	Y	Own 10BB	5	Own 13CB	2F	R	6.72–11.6	Own 13D	O4IA	623	1044	a	TD	65	8 1/16 x3 1/16 x 3/16	C
23	.....632X	10	6600	215	Op	.....	11000	10.50/24D	9.75/20	Own 434	6–4 7/16 x5 1/4	434	5.0	295	116–2400	7–2 3/4 x13 1/16	Y	Own 4B	4	Own 13C	2F	R	6.72–11.6	Own 9D	O4IA	623	1044	a	CI	100	8 1/16 x3 1/16 x 3/16	C
♦ 24	.....720A	5–9	4570	134	212	.....	8600	9.75/20D	10.50/22	Own 396	6–4x5 1/4	396	5.0	270	115–2600	7–2 3/4 x13 1/16	Y	Own 36B	5	Own 43C	2F	R	7.23–8.73	Own 24D	L4IHV	560	875	A	TD	60	8 1/16 x3 1/16 x 1/16	TF
♦ 25	.....722A	8–10	5690	134	212	.....	9800	10.50/20D	11.25/22	Own 460	6–4 7/16 x5 1/4	460	5.0	320	123–2400	7–2 3/4 x13 1/16	Y	Own 36B	5	Own 45C	2F	R	6.67–9.50	Own 9D	O4IA	632	1050	A	TD	60	8 1/16 x3 1/16 x 3/16	T
♦ 26	.....(c.o.e.) 805	1 1/2–3	1790	97	193	.....	4895	7.00/20D	9.00/20	Own 270	6–3 7/16 x4 1/2	270	5.5	195	83–2800	7–2 5/16 x10.7	Y	Own 44B	4	Own 37C	SF	H	5.14–6.83	Own 29D	L4IHV	368	587	a	TX	60	7x2 1/16 x 1/16	T
♦ 27	.....(c.o.e.) 809	1 1/2–3	2315	97	193	.....	6643	7.50/20D	9.00/20	Own 270	6–3 7/16 x4 1/2	270	5.5	195	83–2800	7–2 5/16 x10.7	Y	Own 44B	4	Own 33C	SF	H	5.22–7.14	Own 23D	L4IHV	525	824	a	TX	60	7 1/16 x3x 1/4	T
♦ 28	.....(c.o.e.) 810	2–4 1/2	2590	97	193	.....	6010	7.50/20D	9.75/20	Own 303	6–3 1/16 x4 1/2	303	5.5	215	92–2800	7–2 5/16 x10.7	Y	Own 41B	5	Own 33C	SF	H	5.22–7.14	Own 23D	L4IHV	525	824	a	TX	60	7 1/16 x3x 1/4	C
♦ 29	.....(c.o.e.) 812	3–5	2990	97	193	.....	6600	8.25/20D	9.75/20	Own 318	6–3 7/16 x4 1/2	318	5.5	234	94–2600	7–2 5/16 x10.7	Y	Own 41B	5	Own 33C	SF	H	5.22–7.14	Own 30D	L4IHV	525	824	a	TX	60	8x3 1/4	C
♦ 30	.....(c.o.e.) 818	3–6	3375	97	193	.....	7120	9.00/20D	9.75/22	Own 318	6–3 7/16 x4 1/2	318	5.5	234	94–2600	7–2 5/16 x10.7	Y	Own 41B	5	Own 26C	2F	R	7.23–8.73	Own 28D	L4IHV	491	772	a	TX	60	8x3x 1/4	C
♦ 31	.....(c.o.e.) 805A	2–6	1910	97	193	.....	4970	7.50/20D	9.00/20	Own 270	6–3 1/16 x4 1/2	270	5.5	195	83–2800	7–2 5/16 x10.7	Y	Own 44B	4	Own 37C	SF	H	5.14–6.83	Own 29D	L4IHV	368	587	a	TX	60	7x2 1/16 x 1/16	P
♦ 32	.....(c.o.e.) 809A	3–6 1/2	2480	97	193	.....	5720	8.25/20D	9.00/20	Own 270	6–3 1/16 x4 1/2	270	5.5	195	83–2800	7–2 5/16 x10.7	Y	Own 44B	4	Own 33C	SF	H	5.22–7.14	Own 23D	L4IHV	525	824	a	TX	60	7 1/16 x3x 1/4	P
♦ 33	.....(c.o.e.) 812A	4–7	3270	97	193	.....	6700	9.00/20D	9.75/20	Own 318	6–3 7/16 x4 1/2	318	5.5	234	94–2600	7–2 5/16 x10.7	Y	Own 41B	5	Own 33C	SF	H	5.22–7.14	Own 30D	L4IHV	525	824	a	TX	60	8x3x 1/4	P
♦ 34	.....(c.o.e.) 818A	4 1/2–8	3595	97	193	.....	7275	9.75/20D	10.50/20	Own 318	6–3 7/16 x4 1/2	318	5.5	234	94–2600	7–2 5/16 x10.7	Y	Own 41B	5	Own 26C	2F	R	7.23–8.73	Own 28D	L4IHV	491	772	a	TX	60	8x3x 1/4	P
	Four-Wheel-Drive																														
35	Auto-(1)(d) 4x4 DF	.....	5000	163	163	20000	8415	9.00/20D	9.00/20	Own 404	6–4 1/4 x4 3/4	404	5.5	295	97–2200	7–3x14 3/8	Y	Own DF4	8	Tim 5002	2F	H	**7.35	Tim F501	T4IMV	417	659	c	2I	84 1/2	9x3x 1/4	T
36	car..(d) 4x4 N	.....	6000	167	167	24000	9900	9.75/20D	9.75/20	Own 404	6–4 1/4 x4 3/4	404	5.5	295	97–2200	7–3x14 3/8	Y	Own DF4	8	Tim 72000	2F	H	**7.27	Tim F213	T4IMV	568	866	c	2I	88 1/2	9x3x 1/4	T
37	.....(d) 4x4 NF	.....	6750	168	168	26000	10915	9.75/20D	9.75/20	Own 453	6–4 1/2 x4 3/4	453	5.5	333	108–2200	7–3x14 3/8	Y	Own TF4	8	Tim 1337	2F	H	**7.52	Tim F313	T4IMV	639	975	c	2I	89 1/4	10 1/16 x3x 1/16	T
38	.....(d) 4x4 S	.....	7250	168	168	30000	11145	10.50/20D	10.50/20	Own 501	6–4 1/2 x5 1/4	501	5.5	375	123–2200	7–3 1/4 x14 1/2	Y	Own TF4	8	Tim 1337	2F	H	**7.52	Tim F313	T4IMV	639	975	c	2I	89 1/4	10 1/16 x3x 1/16	T
39	Clydesdale 80 (4x4)	2 1/2–4	***	160	190	18000	5900	7.50/20D	9.00/20	Con E602	6–4 1/4 x4 1/2	361	5.4	252	96–2500	7–2 5/16 x12 3/16	Y	Cla 270V	5	Wis 5002L	W/2	H	.....	Wis F551H	L4IHV	335	782	A	CD	61	9 3/4 x2 3/4 x 1/4	T
40	..(D) 105D (4x4)	5–7	***	170	190	30000	10600	9.75/20D	12.00/20	Bud 6LD468	6–4 1/4 x5 1/2	468	12	342	118–2200	7–3x11 1/2	Y	Fu 5A620	5	Wis 1737 KW	W/2	H	.....	Wis F417W	Ws4IA	654	1080	A	CD	71	10x3x 1/16	T
41	..(D) 90D (4x4)	4–5	***	160	190	23500	8700	9.00/20D	10.50/24	Bud 6LD415	6–4x5 1/2	415	12	305	105–2200	7–3x11 1/2	Y	Cla 270VO	5	Wis 1337BH	W/2	H	.....	Wis 313H	L4IHV	625	974	A	CD	61	9 1/16 x2 3/16 x 1/16	T
42	..(D) 70D (4x4)	2 1/2 x3	***	160	190	18000	5900	7.50/20D	9.00/20	Bud 6LD275	6–3 1/2 x4 3/4	275	12	204	86–2600	7–3x11 1/2	Y	Cla 200VO	5	Tim 59300H	W/2	H	.....	Wis F582H	L4IHV	335	782	A	CD	61	9 3/4 x2 3/4 x 1/4	T
43	Coleman.....E-52	2 1/2	3905	120	144	12800	7200	9.00/24S	9.00/24	Bud K-393	6–4 3/8 x4 1/2	393	4.9	260	103–2600	7–3x11 1/2	Y	Fu RU16	4	Wis CR15	2F	H	4.66–8.05	Ow-Wis CF15	W2/4IH	245	434	G	TD	78	10x2 1/16 x 1/16	B
44	.....E-53	3 1/2	5445	130	180	18600	8000	9.75/24S	9.00/24	Bud K-428	6–4 3/8 x4 3/4	428	4.8	280	107–2600	7–3x11 1/2	Y	Fu MRU16	4	Wis CR30	2F	..	6.6–9.66	Ow-Wis CF30	W2/4IM	360	542	G	TD	88	12x2 1/16 x 1/16	B
45	.....E-54	4 1/2	5775	130	180	21400	8800	10.50/24S	9.75/24	Bud L-468	6–4 1/4 x5 1/2	468	4.8	295	105–2400	7–3x11 1/2	Y	Fu MRU16	4	Wis CR30	2F	..	6.6–9.66	Ow-Wis CF30	W2/4IM	360	542	G	TD	88	12x2 1/16 x1 1/16	B
46	.....E-55	5	6325	130	180	23000	9600	11.25/24S	10.50/24	Bud L-525	6–4 1/2 x5 1/2	525	4.9	336	112–2200	7–3x11 1/2	Y	Fu MRU16	4	Wis CR30	2F	..	6.6–9.66	Ow-Wis CF30	W2/4IM	360	542	G	TD	88	12x2 1/16 x1 1/16	B
47	.....E-56	6–7 1/2	8580	144	180	29800	11600	10.50/24D	11.25/24	Bud GF-6	6–4 3/4 x6	638	4.3	410	126–1850	4–3x10 1/16	Y	Fu MHU12	4	Wis CR122	2F	..	7.69–9.54	Ow-Wis CF12	W2/4IM	360	542	G	TD	104	12x2 5/16 x1 1/4	B
48	.....E-57	7 1/2	10600	144	180	32000	12200	11.25/24D	11.25/24	Ster LT-6	6–5 1/4 x6	779	4.3	410	170–1800	7–3x13 1/2	Y	BL 714	4	Wis CR122	2F	..	7.69–9.54	Ow-Wis CF12	W2/4IM	360	542	G	TD	104	16x2 5/16 x1 1/4	B
49	.....(19) A-68	10	12000	144	180	38100	14000	11.25/24D	11.25/24	Bud GF-6	6–4 3/4 x6	638	4.3	410	126–1850	4–3x10 1/16	Y	Fu MHU12	4	Own RDR	.....	..	6.00–9.87	Own FDR	B2/4IA	440	628	G	TD	104	16x3x1 1/4	A
50	Corbitt.....F12	1 1/2–2	2375	143	180	.....	4420	6.50/20D	7.50/20	Her JXD	6–4x4 1/2	320	5.7	224	95–3000	7–2 1/2 x10 13/16	N	WG T9	4	Tim 53615H	SF	H	5.14–6.6	Wis F30B	L4IH	247	329	a	TX	Opt	6 1/2 x2 3/4 x3/4	T
51	.....F14	2–2 1/2	3200	145	180	.....	5060	7.50/20D	8.25/20	Con A6244	6–3 1/4 x4 3/8	244	5.5	170	83–3200	4–2 3/4 x6 5/8	N	Cla B116	4	Tim 54400H	SF	H	5.8–6.8	Wis F544B	L4IH	257	438	a	TX	Opt	7x3x 1/4	T
52	.....F15	2 1/2–4	4500	155	185	.....	6900	8.25/20D	9.00/20	Lyc WFC	6–3 1/2 x4 3/4	210	6.2	160	82–3500	4–2 3/4 x7 1/8	N	Fu MGU	4	Wis 5002L	2F	H	6.66–8.16	Wis F501H	L4IH	335	782	a	TD	Opt	9 3/4 x2 1/16 x 1/4	T
53	.....F23	3–5	4500	160	185	.....	9000	9.00/20D	9.75/22	Wau 6SRL	6–4 3/4 x5 1/8	462	4.5	300	100–2200	7–3x13 7/8	Y	Fu 5A62	5	Wis 72000L	2F	H	5.61–7.27	Wis F213H	L4IHV	536	870	a	TD	Opt	9 3/4 x2 1/16 x 1/4	T
54	.....F27	4–7	10000	170	210	.....	10100	9.75/20D	10.50/22	Wau 6SRK	6–4 3/4 x5 1/8	517	4.6	330	110–2200	7–3x13 7/8	N	Fu 5A62	5	Wis 1337H	2F	H	6.85–9.41	Wis F313H	L4IHV	625	974	a	TD	Opt	9 3/4 x2 1/16 x 1/4	T
55	.....F35	6–10	10000	185	210	.....	11500	10.50/20D	11.25/22	Wau 6RB	6–5x5 3/4	677	4.8	440	124–1800	7–3 1/2 x17 3/8	..	BL 7341	4	Wis 1737 KW	2F	H	7.14–9.35	Wis F417KW	Ws4IA	654	1080	a	TD	Opt	9 1/16 x3x 1/4	T
56	F. W. D.....HS	1 1/2	2600	132	156	13000	4700	6.50/20D	8.25 20	Wau BK	6–3 3/4 x4 1/4	282	5.2	188	85–3200	7–2 5/8 x10 1/4	Y	Fu 5A33	5	Tim 53539 A1	SF	H	6.36–8 0	Wis F33-8	L4IHV	286	452	G	T4	67 3/4	7 1/16 x2 3/4 x 1/4	C
57	.....HH6	2 1/2–3	4380	138	170	18700	7100	9.75/20S	11.25 20	Wau MK	6–4 1/4 x4 3/4	381	6.1	256	85–2500	7–2 5/8 x12 3/4	Y	BL 3352	5	Own HU	BF	H	6.7–8.84	Own HU	L4IHV	504	867	G	T4	85	7x3x 1/16	C
58	.....SUA	4–5	5440	150	182	23600	8600	11.25/20S	11.25 20	Wau SRL	6–4 3/8 x5 1/8	462	4.6	305	102–2400	7–3x13 7/8	Y	Fu 5A62	5	Own 1938	BF	H	5.6–8.9	Own 1937	L4IHV	504	867	G	T4	90	7x3x 1/16	C
59	.....SU	4–5	5640	150	182	24000	8900	11.25 20S	12.75 20	Wau SRL	6–4 3/8 x5 1/8	462	4.6	305	102–2400	7–3x13 7/8	Y	Own U	5	Own 1938	BF	H	5.6–8.9	Own 1937	L4IHV	504	867	G	T4	90	7x3x 1/16	C
60	.....YU	5–6	6300	150	182	26000	9500	10.50 20D	11.25 20	Wau SRK	6–4 3/8 x5 1/8	517	4.5	330	110–2300	7–3x13 7/8	Y	Own U	5	Own 1938	BF	H	5.6–8.9	Own 1938	L4IHV	504	867	G	T4	90	8x3x 1/16	C
♦ 61	.....MJ5	5–6	6700	150	180	27700	11200	9.75/20D	12.75 20	Wau SRK	6–4 3/8 x5 1/8	517	4.5	330	110–2300	7–3x13 7/8	Y	Fu 5A62	5	Wis 1337	2F	H	6.6–8.67	Wis 1337	L4IHV	666	976	G	T4	95	8x3x 1/16	C
♦ 62	.....MJ6	6–7 1/2	7040	150	180	29000	11400	10.50 20D	12.75 20	Wau 6-125	6–4 3/4 x5 1/8	462	5.0	325	125–2600	7–3x13 7/8	Y	BL 7440	8	Wis 1337	2F	H	6.6–8.67	Wis 1337	L4IHV	666	976	G	T4	95	8x3x 1/16	C
♦ 63	.....M17	7 1/2–10	8800	150	180	37600	12300	12.75 20S	13.50 20	Wau RB	6–5x5 3/4	677	5.3	440	145–2600	7–3 1/2 x11 3/4	Y	BL 7440	8	Wis 1757	2F	H	7.16–8.4	Wis 1757	L4IHV	666	976	G	T4	95	10x3x 1/16	C
64	.....M10	10–12	10400	150	180	40000	13400	13.50 20S	13.50 24	Her HXE	6–5 3/4 x6	935	5.3	612	198–2000	7–3 1/2 x16 5/8	Y	BL 7440	8	Wis 1910	2F	H	7.16–9.35	Wis 1910	W4IA	639	976	G	T4	95	10x3x 1/16	C
♦ 65	.....T26	6–7	2825	144	144	26000	5100	8.25 20D	9.00 20	Wau BK	6–3 3/4 x4 3/4	282	5.3	188	85–3200	7–2 5/8 x10 1/4	Y	Fu 5B330	5	Tim 53539A	SF	H	5.6–8.0	Wis F33-8	L4IHV	286	452	G	T4	68	7 1/16 x2 3/4 x 1/4	C
66	.....T32	7 1/2–10	4890	132	132	32000	9000	9.00 20D	9.75/20	Wau 110	6–4x4 3/4	358	5.0	254	110–2800	7–2 5/8 x12 1/2	Y	Fu 5A430	5	Own HU	BF	H	7.3–9 8	Own HU	L4IHV	568	868	G	T4	70 5/16	10x3x 1/4	C
67	.....T40	10–15	5450	134	134	40000	10500	9.75 20D	10.50 20	Wau 125	6–4 3/4 x5 1/16	462	5 0	325	125–2600	7–3x13 7/8	Y	Fu 5A620	5	Own U	BF	H	7.3–11.2	Own U	L4IHV	568	868	G	T4	71	10x3x 1/4	C
68	.....T60	15–25	6935	134	134	60000	11000	9.75 20D	10.50 20	Wau RB	6–5x5 3/4	677	5 3	440	145–2000	4–3 1/2 x11 3/8	Y	BL 7351	8	Wis 1757	2F	H	5.2–14.9	Own MF	W4IA	568	868	G	T4	80	10x3x 1/4	PC
69	.....T65	20–28	8935	134	134	65000	11300	10.50/20D	10.50/20	Wau RB	6–5x5 3/4	677	5 3	440	145–2000	4–3 1/2 x11 3/8	Y	BL 7481	8	Wis 1757	2F	H	5.4–8.3	Wis 1757	W4IA	666	976	G	T4	80	10x3x 1/4	C
70	.....T72	25–30	10400	120	120	72000	13400	13.50/20D	13.50/20	Her HXE	6–5 3/4 x6	935	5.3	612	198–2000	7–3 1/2 x16 5/8	Y	BL 7440	8	Wis 1910	2F	H	7.16–9.35	Wis 1910	W4IA	639	976	G	T4	65	10x3x 1/16	PC
71	Hug.....43-4	3 1/2–4	6423	144	160	22000	9000	10.50/20S	10.50/26	Bud K428	6–4 3/8 x4 3/4	428	4.8	280	107–2600	7–3x11 1/2	Y	Fu 5A620	5	Wis 72000H	2F	H	5.0–7.27	Wis F213H	L4IHV	536	864	a	TD	70 3/4	8x3x 1/4	T
♦ 72	44-4	4–5	6623	150	160	24000	9600	9.75/20D	10.50/20	Wau 6SRL	6–4 3/8 x5 1/2	462	...	302	102–2000	7–3x12 3/8	Y	Fu 5A620	5	Wis 72000	2F	H	5.00–7.27	Wis F213H	L4IHV	536	864	a	TD	70 3/4	9x3x 1/4	T
♦ 73	.....44S-4	4–5	6756	150	160	24000	9600	9.75/20D	10.50/20	Wau 6SRK	6–4 3/8 x5 1/2	517	...	330	110–2200	7–3x12 3/8	Y	Fu 5A620	5	Wis 72000	2F	H	5.00–7.27	Wis F213H	L4IHV	536	864	a	TD	70 3/4	9x3x 1/4	T
74	.....87K4	4–5	6947	144	160	24000	9700	10.50/20S	10.50/20	Bud K428	6–4 3/8 x4 3/4	428	4.8	280	107–2600	7–3x11 1/2	Y	Fu 5A620	5	Wis 1337BH	2F	H	5.63•8.59	Wis F313H	L4IHV	625	972	a	TD	70 3/4	8x4x 1/4	T
75	.....87Q4	5–7	8676	160	170	28000	10300	11.25/20S	11.25/20	Bud L525	6–4 1/2 x5 1/2	525	4.8	340	111–2200	7–3x11 1/2	Y	Fu 5A620	5	Wis 1737KW	2F	H	5.7–•9.16	Wis F417W	I4A	654	792	a	TD	70 3/4	8x4x 1/4	T
76	48–4	6–7 1/2	7545	150	160	29000	11000	10.50/20D	10.50/20	Wau 6SRK	6–4 3/

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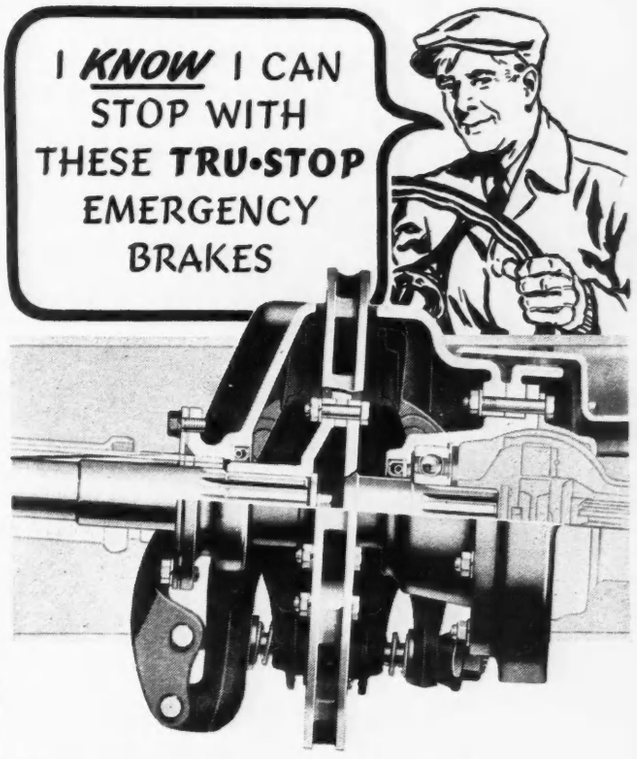
Line Number	MAKE AND MODEL	GENERAL (See Keynote) Tonnage Rating	Chassis Price	Standard Wheelbase	Max. W. B. Furnished	Gross Vehicle Weight with Max. Tires	Chassis Wt. (Stripped)	TIRE SIZES D-dual rear S-single rear: Standard Front and Rear	TIRE SIZES: Maximum Tire Size Furnished	ENGINE DETAILS: Make and Model	No. of Cylinders, Bore and Stroke	Displacement	Comp. Ratio	Torque lb. ft.	Max. Brake H.P. at R.P.M. Given	Main Bearings: Number, Diameter and Length	Governor Standard	TRANSMISSION: Make and Model	TRANSMISSION: Forward Spds'	REAR AXLE: Make and Model	REAR AXLE: Gear and Type	REAR AXLE: Drive & Torque	REAR AXLE: Gear Ratio, Range in High	FRONT AXLE: Make and Model	BRAKES: SERVICE: Make, Location, Type Operat'n	BRAKES: SERVICE: Lining Area	BRAKES: SERVICE: Drum Area	BRAKES: SERVICE: Drum Material	BRAKES: Hand Location Type	C-A Dimension (Std. W. B.)	FRAME: Side Rail Dimensions	FRAME: Type
	Six-Wheelers (Continued) Wheels Driven																														
1	Day-Elder 151T	2R 3	1755	156	199	15000	5300	6.00/20D	8.25/20	Her JXB	6–3⅝x4¼	263	4.4	164	68–2800	7–2½x10⅛	Y	WG T9	4	TimSBT75H	BF	H	4.56–6.6	Tim 30000H	L6IHV	422	606	a	XF	77½	7x3½x¼	C
2	.....211T	2R 4	2235	156	199	21000	6400	32x6D	32x6	Her JXC	6–3¾x4¾	282	4.4	176	73–2800	7–2½x10⅛	Y	WG T9	4	Ti SBT151H	BF	R	4.44–7.4	Tim 31000H	L6IHV	529	930	a	XF	108½	7x3½x¼	C
3	.....251T	2R 5	3020	165	204	25000	8100	32x6D	8.25/20	Her WXC	6–4x4½	339	4.7	234	94–2800	7–2⅝x13¼	Y	Fu MLU	4	Ti SBT251H	BF	R	4.55–7.8	Tim 33000H	L6IHV	636	1094	a	DF	118½	9x3½x¼	C
4	.....281T	2R 6	3440	165	204	28000	8300	8.25/20D	9.00/20	Her WXC3	6–4¼x4½	383	4.7	265	106–2800	7–2⅝x13¼	Y	Fu MGU	4	Ti SBT251H	BF	R	4.55–7.8	Tim 33000H	L6IHV	636	1094	a	DF	118½	9x3½x¼	C
5	.....301D	4R 7	4110	165	204	30000	8400	9.00/20D	9.75/20	Her WXC3	6–4¼x4½	383	4.7	265	106–2800	7–2⅝x13¼	Y	Fu 5A530	5	Ti SWD251H	WF	R	5.0–9.25	Tim 33000H	L6IHV	636	1094	a	DF	149	10x3¾x⅜	C
6	.....331D	4R 8	4995	165	234	33000	10600	9.00/20D	9.75/20	Her RXC	6–4⅝x5¼	529	4.4	350	114–2200	7–3x12½	Y	Fu 5A530	5	Ti SWD251H	WF	R	5.0–9.25	Tim 26450H	L6IHV	664	1194	a	DF	149	10x3¾x⅜	C
7	Fageol .226BK	2F 5–6	2633	183	196	23600	7000	7.50/20D	8.25/20	Wau 6BK	6–3¾x4¼	282	5.1	190	82–2800	7–2⅝x10¼	N	WG T9	4	Tim SBT151	BF	R	4.44–7.4	Tim 31000H	L4IHV	557	929	G	TX	104	8x3x¼	T
8	.....326HP	2F 6–8	4175	201	215	31400	8950	9.00/20D	9.75/20	Wau 6-110	6–4x4¾	358	5.2	254	110–2800	7–2⅞x12½	Y	BL 5241	4	Tim SBT251	BF	R	5.56–7.8	Tim 35020H	L4IHV	643	1093	G	FD	118½	10¾x3½x¼	T
9	.....846HP	4R 8	7375	211	222	42000	13300	9.75/20D	10.50/20	Wau 6-125	6–4⅜x5⅛	462	5.2	324	125–2600	7–3x13⅞	Y	BL 7341	4	Tim Own	WF	R	6.0–9.25	Tim 26050N	Ws4rIA	760	1083	H	FD	124½	15x4x⅞	T
10	.....846AL	4R 8	8375	211	222	42000	11150	9.75/20D	10.50/20	Wau 6-125	6–4⅜x5⅛	462	5.2	324	125–2600	7–3x13⅞	Y	BL 7341	4	Tim Own	WF	R	6.0–9.25	Tim 26050N	Ws4rIA	760	1083	H	FD	124½	15x4x⅝	T
11	(D) 846ALD	4R 8	10400	222	233	42000	12250	9.75/20D	10.50/20	Cum HB	6–4⅞x6	672	17. 500		150–1800	7–4½x16½	Y	BL 7341	4	Tim Own	WF	R	6.0–9.25	Tim 26050N	Ws4rIA	760	1083	H	FD	127¼	15x4x⅝	T
12	....1046RB	4R 10	8458	222	233	58000	14500	9.75/20D	10.50/20	Wau 6RB	6–5x5¾	677	4.4	440	125–1800	4–3½x11⅛	N	BL 7341	4	Tim Own	WF	R	6.0–9.5	Tim 27050N	Ws4rIA	760	1083	H	FD	127¼	15x4x⅜	T
13	....1046AL	4R 10	9458	222	233	58000	12400	9.75/20D	10.50/20	Wau 6RB	6–5x5¾	677	4.4	440	125–1800	4–3½x11⅛	N	BL 7341	4	Tim Own	WF	R	6.0–9.5	Tim 27050N	Ws4rIA	760	1083	H	FD	127¼	15x4x⅜	T
14	(D)1046ALD	4R 10	10800	222	233	58000	13500	9.75/20D	10.50/20	Cum HB	6–4⅞x6	672	17. 500		150–1800	7–4½x16½	Y	BL 7341	4	Tim Own	WF	R	6.0–9.5	Tim 27050N	Ws4rIA	760	1083	H	FD	127¼	15x4x⅜	T
15	F. W. D....MJ6X6	10	10800	184	204	40000	17200	10.50/20D	12.75/20	Wau SRK	6–4⅝x5½	517	4.5	330	110–2300	7–3x13⅞	Y	BL 7440	8	Wis SDD35200	2F	R	7.33–9.56	Wis 1337	W61A	828	1302	G	TX	120	10x3x¼	PC
♦ 16	.....M6x6	15	12300	204	204	52400	18200	13.50/20S	13.50/20S	Wau RB	6–5x5¾	677	4.4	440	145–2000	4–3½x11⅜	Y	BL 7440	8	Wis SDD452W	2F	R	7.33–9.56	Wis 1910	W61A	828	1302	G	TX	145	10x3x¼	PC
♦ 17	Hen- A-126-T	2R	***	120	210	22100	6200	6.00/20D	34x7	Wau 6BK	6–3¾x4¼	282	5.1	185	85–3200	7–2⅝x10¼	Y	Fu 5A33	5	Cla R950	BF	H	5.57–6.83	Cfa F280	L6IH	423	591	C	TX	Opt	8x3x⅞	C
♦ 18	dri'k'nA-165-T	2R	2960	140	210	27500	6800	7.50/20D	9.00/20	Wau 6BK	6–3¾x4¼	282	5.1	185	85–3200	7–2⅝x10¼	Y	Fu 5A33	5	Cla R1100	BF	H	5.66–6.87	Cla F320	L6IHV	575	800	C	TX	Opt	8x3x⅞	P
♦ 19	....A-210-T	2R	3975	140	210	36500	8000	8.25/20D	10.50/20	Wau 6-110	6–4x4¾	358	4.6	254	110–2800	7–2⅝x12½	Y	Fu 5A43	5	Cla B805	BF	H	5.75–7.16	Cla F320	L6IHV	780	1070	G	TX	Opt	8x3x⅞	P
♦ 20	....A-275-F	4R	3475	157	240	27500	8100	8.25/20D	9.00/20	Wau 6BK	6–3¾x4¼	282	5.1	185	85–3200	7–2⅝x10¼	Y	Fu 5A330	5	Eat 1186	BF	H	** –7.4	Cla F320	L6IHV	575	800	G	TX	Opt	8x3x⅞	P
♦ 21	....A-375-F	4R	4900	160	240	37500	10500	9.00/20D	9.75/20	Wau 6-110	6–4x4¾	358	4.6	254	110–2800	7–2⅝x12½	Y	Fu 5A430	5	Eat 2430X	BF	H	** –7.16	Tim 26450H	L6IHV	809	1175	G	TD	Opt	8x3x⅞	P
♦ 22	....A-420-F	.....	6600	160	240	42000	11200	9.75/20D	9.75/20	Wau 6-125	6–4⅜x5½	462	4.6	324	125–2600	7–3x13⅞	Y	Fu 5A620	5	Eat 2530X	BF	H	** –7.16	Tim 27450H	WM6IA	809	1175	G	TD	Opt	8x3x⅞	P
23	Hug....97LD	4R 7½	8936	175	175	50000	13000	10.50/20D	10.50/20	Bud L525	6–4½x5½	525	4.8	340	111–2000	7–3x11⅛	Y	Fu 5A620	5	Wis SD310	2F	T	7.33–10.2	Shu 715	L4IHV	720	1080	a	TD	88	9x4⅜x⅞	I
24	99	4R 10	10665	175	175	65000	15100	11.25/20D	11.25/20	Bud GF638	6–4¾x6	638	4.8	406	133–2000	4–3x10⅞	Y	Spl 7341	4	Wis SD420W	2F	T	7.33–10.2	Shu 1673	W61A	1027	1581	A	TD	92	9x4⅜x⅞	I
25	.....(d) 36	4R 10	13150	175	175	65000	.....	11.25/24D	11.25/24	Cat D8800	4–5¾x8	831	15	496	80–1200	5–3½x14	Y	Spl 7341	4	Wis SD420W	2F	T	7.33–10.2	Tim 27452	W61A	1006	1602	a	TD	92	9x4⅜x⅞	I
♦ 26	.....99S	10	13462	175	175	75000	18140	12.75/20D	12.75/20	Bud GF638	6–4¾x6	638	4.8	406	133–2000	4–3x10⅞	Y	Spl 7341	4	Wis SD520	2F	T	10.01–11.66	Shu 1673	W61A	1027	1581	a	TD	92	9x4⅜x⅞	I
27	Ind- 95SW-75	4R 3½–5	1900	168	186	.....	5800	32x6D	7.50/20	Her JXC	6–3¼x4¼	282	5.4	176	73–2800	7–2½x10⅛	Y	BL 2353	4	Tim SW75	WF	A	6.2–7.4	Tim 31020H	L6IHV	530	688	G	TX	83	7⅞x2¾x⅛	T
♦ 28	iana...16X6	6 3–4	(20)	160	Op	.....	8000	7.00/20D	7.50/20	Her YXC	6–4⅜x4¾	428	4.5	283	94–2200	7–3x14	Y	BL 5341	4	Wis SFD151	2F	A	5.90–7.66	Wis F200	L4IHV	406	914	G	TD	72	8½x3x⅞	T
♦ 29	.....18X6	6 4½–6	(20)	172	Op	.....	10500	8.25/20D	8.25/20	Her RXC	6–4⅝x5¼	529	5.4	350	111–2000	7–3x14	Y	BL 5341	4	Wis SD251H	2F	A	7.66–8.44	Wis 210	L4IHV	576	1299	G	TD	84	8¾x3x⅜	T
♦ 30	.....20X6	6 5½–8	(20)	200	Op	.....	15000	9.75/20D	9.75/20	Her HXB	6–5x6	707	5.4	455	148–2000	7–3½x17	Y	BL 7341	4	Wis SFD320W	2F	A	7.33–9.11	Wis F310	Ws4IA	588	1517	G	TD	99	10x3x⅞	T
♦ 31	.....22X6	6 7½–10	(20)	200	Op	.....	16000	9.75/24D	9.75/24	Her HXB	6–5x6	707	5.4	455	148–2000	7–3½x17	Y	BL 7341	4	Wis SFD420W	2F	A	7.33–9.11	Wis F310	Ws4IA	588	1517	G	TD	100	10x3x⅞	T
32	Inter-national.C35T	2F 1½–4	1575	168	186	19000	5410	6.50/20D	7.50/20	Own FAB223	6–3 7/8x4	223	5.4	160	78–3400	4–2⅜x5 11/16	N	Own H4A	4	Own	SF	HT	5.62–7.40	OwnH108HT	B6IH	462	648	c	TX	84⅜	7⅞x3 11/16	TL
33	.....C35S	2F 1½–4	1670	168	186	19000	5440	6.50/20D	7.50/20	Own FAB223	6–3 7/8x4	223	5.4	160	78–3400	4–2⅜x5 11/16	N	Own H4A	4	Own	SF	HT	5.14–8.10	OwnH108HT	B6IH	462	648	c	TX	84⅜	7⅞x3x11/16	TL
34	.....D-216-T	2F 2–4	1760	176	194	21000	6370	7.00/20D	34x7	OwnFab-241	6–3½x4½	241	5.8	175	84–3200	4–2⅜x5 11/16	N	Own W-42	4	Own RT-1400	SF	H	7.40–1.	Own F-400	B6IH	557	780	C	TX	102	8 7/8x7/8x3 7/8	TL
35	.....C40T	2F 2–5	2200	168	204	24000	6490	7.50/20D	34x7	Own FAB223	6–3 7/8x4	223	5.4	160	78–3400	4–2⅜x5 11/16	N	Own F5	5	Own	SF	HT	5.62–7.40	Own 251½H	B6IHV	590	816	c	TX	84⅜	8 7/8x3½x11/16	TL
36	.....C40F	4R 2–5	2975	168	204	24500	7200	7.50/20D	34x7	Own FAB223	6–3 7/8x4	223	5.4	160	78–3400	4–2⅜x5 11/16	N	Own F5	5	Own 1540	SF	HT	5.16–12.28	Own 251½H	B6IHV	590	816	c	TX	84⅜	8 7/8x3½x11/16	TL
37	....D-246-F	4R 2½–5	3300	161	215	24000	8310	7.50/20D	36x8	Ow FBB298	6–3¾x4½	298	5.7	218	94–2800	7–2 11/16x11 11/16	Y	Own F51	5	Own RF1401	SF	H	7.40–1.	Own F500	B4IH	590	816	C	P	84	7x3⅝x3⅜	C
38	....D-246-T	2F 2½–5	2850	161	215	24000	8185	7.50/20D	36x8	Ow FBB298	6–3¾x4½	298	5.7	218	94–2800	7–2 11/16x11 11/16	Y	Own F51	5	Own RT1500	SF	H	7.16–1.	Own F500	B4IH	599	855	C	P	84	9¼x3⅝x3 7/8	C
39	.....CS50T	2F 3–6	3450	170	206	28000	7980	8.25/20D	9.00/20	Ow FBB279	6–3⅝x4½	279	4.6	191	83–2900	7–2 11/16x11 11/16	Y	Own H5	5	Own 950H	SF	H	5.62–8.74	Own 350H	B6IHV	625	892	c	TX	84¾	8 7/8x4x½	TL
40	.....C55F	4R 3½–7	4950	170	224	36700	10170	9.00/20D	9.75/20	Ow FBB298	6–3¾x4½	298	5.7	214	90–2800	7–2 11/16x11 11/16	Y	Own H5	5	Own 1555	SF	HT	5.69–11.89	Own 350HT	B6IHV	775	1106	c	TX	85½	8 11/16x4 7/8x3⅝	TL
41	.....C55T	2F 3½–7	3950	170	224	36000	9315	9.00/20D	9.75/20	Ow FBB298	6–3¾x4½	298	5.7	214	90–2800	7–2 11/16x11 11/16	Y	Own H5	5	Own	SF	HT	6.43–7.16	Own 350HT	B6IHV	775	1106	c	TX	85½	8 11/16x4 7/8x3⅝	TL
42	.....C60T	2F 3½–7	4075	170	224	36000	9395	9.00/20D	9.75/20	Ow FBB298	6–3¾x4½	298	5.7	214	90–2800	7–2 11/16x11 11/16	Y	Own H5	5	Own	SF	HT	7.1 –9.43	Own 350HT	B6IHV	775	1106	c	TX	84¾	8 11/16x4 7/8x3⅝	TL
♦ 43	....D-346-F	4R 3½–7	5900	161	215	34000	11215	9.00/20D	9.75/20	Ow FBB401	6–4½x5	400	5.2	308	114–2600	7–2 11/16x11 11/16	Y	Own F52	5	Own RF1610	SF	H	7.16–1.0	Own F700	T6IA	805	1192	G	TD	.....	10½x4x3 7/8	TL
♦ 44	.....AR-626F	4R 10–15	12500	180	253	62000	18355	9.75/24D	11.25/24	Own FEB	6–5x5½	648	4.4	460	140–2100	7–3¼x17⅜	Y	Own H7	5	Own 1557	2F	RT	9.4–11.1	Own 505	T6IA	1028	1520	C	TD	92	12½x3½x3⅝	TL
♦ 45	Ken-...89SBT	2F	***	188	224	26500	7350	32x6D	9.00/20	Her JXCM	6–3¾x4¼	282	5.7	176	83–2500	7–2½x10⅛	N	BL 234	4	Tim SBT151	SF	A	6.16–7.4	Tim 31000H	L6IHV	624	930	a	TX	102	8x3x½	C
♦ 46	worth.127SBT	2F	***	188	224	28000	8000	8.25/20D	9.00/20	Her WXC2	6–4⅜x4½	361	5.0	250	100–2800	7–2⅝x13¼	N	BL 3341	4	Tim SBT151	SF	A	6.16–7.4	Tim 33000H	L6IHV	624	930	a	FD	102	8x3x½	C
♦ 47	....146SBT	2F	***	188	224	33000	8400	9.00/20D	9.75/20	Bud K393	6–4 7/8x4¾	393	4.9	260	103–2600	7–3x11½	N	BL 3341	4	Tim SBT251	SF	A	6.8–7.8	Tim 33000H	L6IHV	720	1093	a	FD	102	8x3x½	C
48	.....346C	4R	***	210	240	42000	14000	9.75/20D	9.75/20	HaS 175	6–5x6	707	5.0	506	179–1800	7–3¼x11 7/8	Y	BL 7341	4	Tim SW352	WF	H	6.0–7.6	Tim 36020N	Ws2rA	720	1192	a	FD	120	8x3x½	C
49	.....386C	4R	***	210	240	50100	14500	9.75/20D	10.50/20	HaS 175	6–5x6	707	5.0	506	179–1800	7–3¼x11 7/8	Y	BL 7341	4	Tim SW452	WF	H	6.0–7.6	Tim 36020N	Ws2rA	1014	1192	a	FD	120	8x3x½	C
♦ 50	....(D) 508	2F	***	186	228	.....	11850	9.00/20D	9.75/20	Cum HB4	4–4⅞x6	448	17.	287	83–1800	5–4½x11½	Y	BL 5341	4	Ti SBT251H	SF	R	4.56–7.80	Tim 35100H	L4IH	668	1193	a	TD	102	7½x3¼x¼	C
♦ 51	....(D) 509	4R	***	186	228	35000	12100	9.00/20D	9.75/20	Cum HB4	4–4⅞x6	448	17.	287	83–1800	5–4½x11½	Y	BL 5341	4	Tim SW251H	SF	R	5.00–9.25	Tim 35100H	L4IH	668	1193	a	TD	102	7½x3¼x¼	C
♦ 52	....(D) 510	2F	***	221	247	38000	12630	9.00/22D	9.75/24	Cum HB6	6–4⅞x6	672	17.	427	125–1800	7–4½x16½	Y	BL 7341	4	Tim 59000	SF	R	6.04–9.55	Tim 36000	Ws4rIA	636	948	a	TD	134	7½x3¼x¼	C
♦ 53	....(D) 512	4R	***	205	235	38000	13500	9.00/20D	9.75/20	Cum HB6	6–4⅞x6	672	17.	427	125–1800	7–4½x16½	Y	BL 7341	4	Tim SW251	SF	R	5.00–9.25	Tim 36000	Ws4rIA	568	867	a	TD	116⅝	7½x3¼x¼	C
♦ 54	513	6	***	200	224	28000	11500	9.00/20D	9.00/20	Her JXDM	6–4¼x6	320	5.9	224	95–2800	7–2½x10⅛	Y	BL 3341	4	Tim SD151H	2F	R	** –7.21	Wis F209H	L6IH	618	1056	a	TD	116⅝	7½x3¼x¼	C
♦ 55	....(D) 514	6	***	200	224	28000	13000	9.00/20D	9.00/20	Cum HB4	4–4⅞x6	448	17.	287	83–1800	5–4½x11½	Y	BL 5341	4	Tim SD151H	2F	R	** –7.21	Wis F209H	L6IH	618	1056	a	TD	127	7½x3¼x¼	C
♦ 56	....(D) 520	2F	***	214	239	36300	12200	9.00/20D	10.50/20	Cum HB6	6–4⅞x6	672	17.	427	125–1800	7–4½x16½	Y	BL 7341	4	Tim 75736	2F	H	6.85–9.41	Tim 35100	Ws4rIA	636	948	a	TD	127	7½x3¼x¼	C
♦ 57	....(D) 522	2F	***	214	239	45000	12150	9.00/20D	10.50/22	Cum HB6	6–4⅞x6	672	17.	427	125–1800	7–4½x16½	Y	BL 7341	4	Tim 76736	2F	H	6.02–9.2	Tim 36000	Ws4rIA	636	948	a	TD	127	7½x3¼x¼	C
♦ 58	....(D) 523	4R	***	214	239	42000	13700	9.00/20D	10.50/24	Cum HB6	6–4⅞x6	672	17.	427	125–1800	7–4½x16½	Y	BL 7341	4	Tim SW352	WF	R	6.00–8.5	Tim 36000	Ws4rIA	800	1190	a	TD	127	7½x3¼x¼	C
♦ 59	....(D) 524	4R	***	214	239	54000	14700	9.75/20D	10.50/24	Cum HB6	6–4⅞x6	672	17.	427	125–1800	7–4½x16½	Y	BL 7341	4	SW452	WF	R	6.00–8.2	Tim 36000	Ws4rIA	800	1190	a	TD	.....	7½x3¼x¼	C
♦ 60	LeMoon407SW75	4R 2–5	2700	144	Op	.....	6500	6.50/20D	32x6	Wau 6BK	6–3¾x4¼	282	5.2	190	85–3200	7–2⅝x10¼	N	BL 234	4	Tim SW75	WF	H	6.2–7.4	Tim 30000H	L6IHV	532	887	A	TX	Opt	8x3½x¼	T
♦ 61	507-SBD 1000	4R 4–8	3500	187	199	.....	8000	32x6D	8.25/20	Wau 6MK	6–4⅛x4¾	381	6.5	254	85–2400	7–2⅝x12½	N	Cla 270V	4	Tim SBD1000	WF	H	7.11–8.30	Tim 32502H	L6IHV	593	1094	A	TD	Opt	9x4x¼	T
62	806	4R 5–10	4900	187	199	.....	9720	9.00/20D	9.75/20	Wau 6SRL	6–4⅜x5⅛	462	4.5	300	102–2400	7–3x13⅞	Y	BL 5341	4	Tim SW251	WF	H	6.2–9.1	Tim 35000H	L6IHV	633	1100	A	CD	Opt	9x4x¼	T
63	907	4R 7–8	7950	191	203	.....	12000	9.75/20D	40x8	Wau 6-125	6–4⅜x5⅛	462	5.2	330	125–2500	7–3x13⅞	Y	BL 5351	5	TimSW310W	WF	H	7.25–9.25	Tim 35000W	Ws4IA	966	1517	c	CD	108	9x4x¼	B
64	1200	4R 10–12	8500	196	208	.....	14000	9.75/20D	40x8	Wau 6RB	6–5x5¾	677	4.4	460	127–2000	4–3½x11¾	Y	BL 7351	5	TimSW410W	WF	H	7.6–9.5	Tim 26050W	Ws6IA	966	1517	c	CD	108	9x4x⅞	B
65	.....1200D	4R 10–12	9750	196	208	.....	14000	9.75/20D	40x8	Cum.Dle.H6	6–4⅞x6	672	17.1	420	125–1800	7–3¼x16½	Y	BL 7351	5	TimSW410W	WF	H	7.6–9.5	Tim 26050W	Ws6IA	966	1517	c	CD	108	9x4x⅞	B
66	Mack.....BX	2F	7000	196	221	.....	13050	8.25/22D	9.75/24	Own CF	6–4¼x5½	468	5 0	310	118–2400	7–3x12⅞	Y	Own CF	5	Own BX	2F	A	6.46–9.05	Own BX	O6IA	974	1518	a	FX	125	9½x3x¼	T
67	.....BX	4R	7500	194	219	.....	14050	8.25/22D	9.75/24	Own CF	6–4¼x5½	468	5.0	310	118–2400	7–3x12⅞	Y	Own CF	5	Own BX6	2F	A	6.54–10.0	Own BX	O6IA	974	1518	a	FX	125	9½x3x¼	T
68	(e.b.s)...CJ	2F	7850	149	188	.....	13100	8.25/22D	9.75 24	Own CF	6–4¼x5½	468	5 0	310	118–2400	7–3x12⅞	Y	Own CF	5	Own BX	2F	A	6.46–9.05	Own CJ	O6IA	974	1518	a	FX	123	9½x3x¼	T
69	(e.b.s)...CJ	4R	8350	147	186	.....	13950	8.25/22D	9.75/24	Own CF	6–4¼x5½	468	5 0	310	118–2400	7–3x12⅞	Y	Own CF	5	Own BX6	2F	A	6.54–10.0	Own CJ	O6IA	974	1518	a	FX	123	9½x3x¼	T
70	.....BQ	2F	8850	199	235	.....	15150	9.75/22D	9.75/24	Own BQ	6–4¾x5¾	611	4 8	390	125–2200	4–3½x10⅞	Y	Own AK	4	Own AK	2F	A	7.43–10.0	Own BQ	O6IA	1065	1626	a	FX	123	10½x3x¼	T
71	.....BQ	4R	9350	197	233	.....	15550	9.75/22D	9.75/24	Own BQ	6–4¾x5¾	611	4.8	390	125–2200	4–3½x10⅞	Y	Own AK	4	Own BX6	2F	A	6.54–10.0	Own BQ	O6IA	1065	1626	a	FX	123	10½x3x¼	T
72	Marmon.....C5-6	3–6	2425	154	.....	.....	5821	6.00/20D	32x6	Ford V8	8–3 1/8x3½	221	6.12	146	85–3800	3–2. 4x5⅛	ZZ	Ford	4	Tim	2F	R	** 6 67	Own IX41	61H	496	629	a	2261	80 1/4	7½x2½x⅛	TL
73	Herrington..C6-6	3–6	2475	154	179	.....	5925	6.00/20D	32x6	Ford V8	8–3 1/8x3½	221	6.12	146	85–3800	3–2. 4x5⅛	ZZ	Ford	4	Tim	2F	R	** 6 67	Own IX41	61H	496	629	a	2261	80 1/4	7½x2½x⅛	TL
74	.....C20-6	5–6	3095	167	Op	.....	7800	7.00/20D	7.00/20	Her JXC	6–3⅝x4¼	282	5.3	198	84–2800	7–2 11/16x10⅛	N	Fu 5A33	5	Wis MH922	2F	R	7.36	Own MH92	W3I MH92	600	1055	a	TX	84	7½x2½x⅛	P
75	.....C30-6	6–8	4795	167	Op	.....	8400	7.00 20D	8.25/20	Her JXD	6–4x4¼	320	5.3	224	95–2800	7–2½x10⅛	N	Fu 5A33	5	Wis MH933	2F	R	7.66	WH MH93	61H	600	1055	a	TX	84	7½x2½x⅛	P
76	.....C50-6	7–9	7135	158	Op	.....	10000	8.25 22D	9.00/20	Her WXLC3	6–4¼x4¾	404	5 0	293	118–2800	7–2⅝x13¼	Y	Fu 5A430	5	Wis MH933	2F	R	9.33	WH MH95	61A	726	1300	a	FD	84	9¼x3x¼	P
77	.....C60-6	8–10	8500	173	Op	.....	11700	9.00/20D	9.00/20	Her RXB	6–4½x5¼	501	4.5	330	110–2200	7–3x14	Y	Fu 5A620	5	Wis MH955	2F	R	8.44	WH MH95	61A	726	1300	a	FD	84	9¼x3x¼	P
78	.....C80-6	8–10	9500	173	Op	.....	13000	9.00/20D	9.00/20	Her RXB	6–4½x5¼	501	4.5	330	110–2200	7–3x14	Y	Fu 5A620	5	Wis MH955	2F	R	** 9.15	WH MH96	61A	1056	1626	a	FD	84	10x3	P



AN EMERGENCY BRAKE ENGINEERED FOR FORD V-8 AND CHEVROLET TRUCKS AND BUSES

● TRU-STOP Emergency Brakes have the braking ability to stop any Ford V-8 or Chevrolet truck or bus—under full load. When seconds and inches count, their fast and positive braking action insures the fullest measure of safety.

Braking action is smooth, quiet and powerful. It is in direct ratio to the effort on the brake lever. There is no chattering or grabbing even under full loads and high speed.

Any mechanic can install TRU-STOP Brakes in a Ford V-8 or a Chevrolet. Linings wear evenly, last longer because ventilated disc construction dissipates braking heat quickly. If relining is required, any driver can do it in a few minutes.

Install TRU-STOP Emergency Brakes *now*. They comply with the strictest state laws.

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In Business for Your Safety

ACCO

TRU-STOP *Emergency* BRAKES

for Chevrolet and Ford V-8 Trucks & Buses

Finding Hidden Flaws

(CONTINUED FROM PAGE 22)

enough about it. However the number of mistakes that can be made in building this equipment is appalling and the average fleet man would be better off buying the equipment which is, so COMMERCIAL CAR JOURNAL understands, sold at cost through the Magnaflux Corp.

The profit for the patent holder comes in the form of a royalty which the user must pay and it is impossible to duck this fee because it is necessary to use Magnaflux powder, a ferrous powder which the company will not sell except to those who have paid up royalties. The powder is critical and any attempt to substitute will result in failure. The powder one pound of which will test 1000 lb. of steel sells for something less than $1.50 per lb.

TO get back to the operation of the Magnaflux, the part to be tested is magnetized. If the surface is a rough finish the Magnaflux powder is sprinkled on the surface from a can with a sifter top. It is possible to catch the powder and use it over again. After the surface is covered with powder the part is tapped with a mallet and all of the powder will drop off except that which adheres to the surface at a surface or internal crack immediately pointing out the crack to the inspector.

If the surface of the part to be tested has a machined finish the process differs only in that the powder comes held in suspension in a light viscosity oil and this mixture is poured over the part with a dipper. The part is then bathed with carbon tetrachloride and inspected for sticking powder. This difference in method is only for the sake of visibility.

The theory of the process is as follows: parts to be inspected are first longitudinally or circularly magnetized using a standard magnetizing unit. When properly magnetized, defects in the part result in local flux leakage areas. Magnaflux powder being of high magnetic permeability offers low reluctance path and consequently adheres along the lines of flux leakage. The resulting pattern tells the inspector the location, extent and character of the defect leaving him to decide upon acceptance or rejection.

Previous to the adoption of the Magnaflux in 1932 Mr. Cumming had noticed a startling increase in the number of cases of fatigue failure in his fleet. Part of this increase came from the newer vehicles which he felt was due to increased power and greater speed. It occurred in many varying parts hitherto unaffected and finally became not only a serious factor in maintenance costs but threatened the safety standards as well. A long list of mechanical parts and units were affected and upon examination it was indicated that further increases might be expected unless some preventive measure was adopted that could identify fatigue in its initial stage and thereby eliminate a recurrence of the failures or establish the necessity for absolute and immediate discard. It was during this period that Magnaflux was adopted and while there were some other factors involved Mr. Cumming feels that the Magnaflux was chiefly responsible for cutting road failures 89 per cent from 1932 to 1936.

This positive inspection once under way disclosed the fact that a majority of the failures were design and surface failures and not strictly metal failures. The importance of large fillets and well rounded corners became evident and in the establishment of salvage practice one of the important features was the elimination of sharp corners from steering knuckles and elimination of manufacturers part numbers from critical points. Crankshafts are reground with

(TURN TO PAGE 64, PLEASE)

YOU CAN CUT YOUR WELDING COSTS 50% WITH THIS New LINCOLN

THIS handy new arc welder uses as little as 5c worth of electric power per hour. With it you can weld faster, get stronger results and apply welding successfully to more jobs than with the other welding process. Every day in the year you can save at least 50% on jobs like these:

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Weld cracked cylinder heads and blocks
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You can pay for this powerful motor-generator type arc welder out of a few months' savings . . . *ASK FOR PROOF!*

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Salient Facts
RANGE . . 45 to 200 Amperes with reserve overload capacity.
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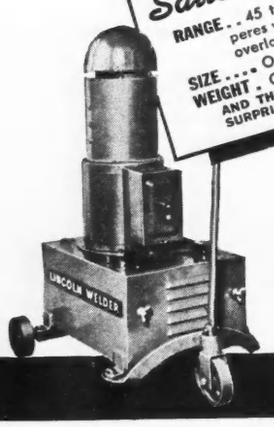
AND THE PRICE IS SURPRISINGLY LOW



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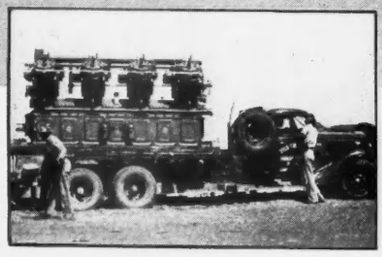
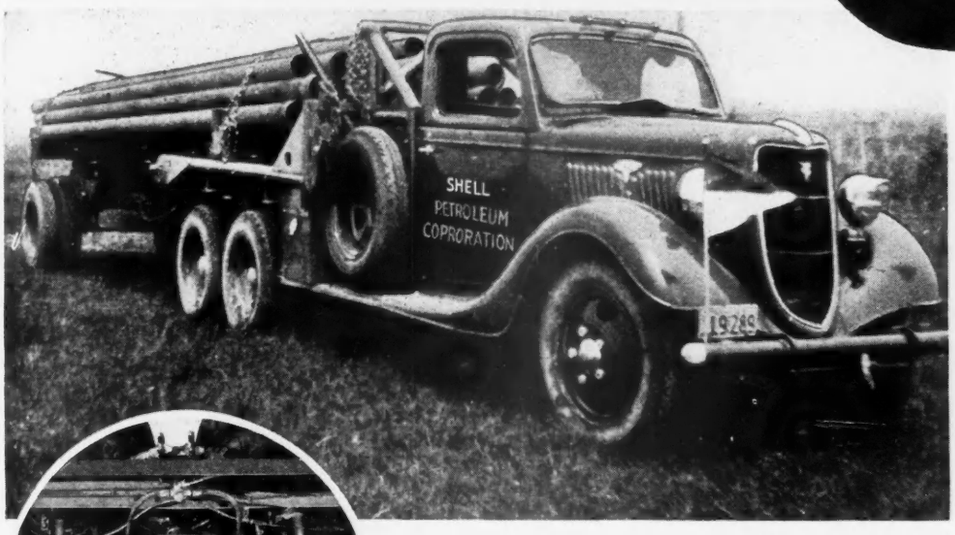
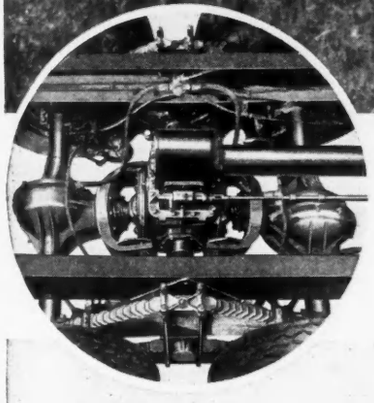


Thornton Four Rear Wheel Drive in Oil Fields



OIL and gas producers and pipe line men are rapidly replacing heavy, expensive trucks with lighter ones, with *four-rear-wheel drives* engineered into them. These Thornton-equipped trucks have no equal for off-the-road service, because of their traction, flotation and increased rim-pull. The oil field operations pictured here are all standard Ford 1½ ton trucks with the Thornton Drive engineered into them.

A LETTER will bring you full description of the Thornton Drive and how it fits into oil field work. Mention make of chassis you prefer, and type of operation. Many are mounting hoists, drills and other portable machinery on Thornton Drive trucks.



THORNTON DRIVE incudes 2 standard rear axles; inter-axle reduction gear case, 8 speeds (final creeper-gear ratio 87 to 1); walking-beam springs; added 7½" frame.

Thornton Tandem Company
5130 Braden St., Detroit, Michigan

(CONTINUED FROM PAGE 62)

more spacious fillets and connecting rod forgings are draw filed to smooth out tool marks on critical surfaces. In fact any previous serious cause of failure overlooked by the manufacturer is rectified before application or reapplication.

SURFACE cracks can be filed out without trouble providing they do not go too deep. After 4 years of Magnaflux inspection the front axles and steering knuckles of the Surface Transportation fleet look as though dogs had been chewing at them. Any surface irregularity of any part if it is at a critical point has been found to be a source of trouble. For that reason Mr. Cumming prefers machine finished axle shafts. He has found, conversely, in other parts that "pretty design" when it involves sharp corners and small fillets is a sure cause for trouble.

Another use was found for the testing equipment with startling results. New replacement parts were tested before they were accepted and placed in stock. A surprising number of them already showed unmistakable signs of failure and were accordingly sent back. Suppliers must meet the Magnaflux test in order to sell parts or material to this fleet. Welding within the fleet shop has improved materially since it has been possible to check on the jobs before failure.

Some truck factories are using the equipment in building trucks. Likewise it can be found in automobile, aircraft and railroad factories. Railroad operators and aircraft operators are using it religiously but Surface Transportation Co. seems to be the sole pioneer in fleet operation.

DIETZ FOG LITES FOR SAFETY

PROSPECTS of disaster ride with every turn of the wheels, when motor trucks are running at night through mist and fog, driving snow or rain.

Under such conditions Dietz Fog Lites, fitted with approved amber lenses, and mounted close to the road, intercept and neutralize certain blinding, confusing rays set up by white lens lamps, thus giving clearer vision to drivers, which enables them to see the edge of the road, gutters and curves ahead.

DIETZ FOG LITES PROMOTE SAFETY DURING THE MOST CRITICAL MOMENTS OF DRIVING. THEY ARE ESSENTIAL, ECONOMICAL, LONG WEARING EQUIPMENT AND SHOULD BE ON EVERY TRUCK AND AUTOMOBILE.

DIETZ

Dietz Fog Lites are made in two general styles, with variations of mounting and finish.

Your Dealer can supply these Lites. Let him send you one or two pairs and try them out.

R. E. DIETZ COMPANY, NEW YORK

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HEAD LIGHTS • TAIL LIGHTS • MARKER LIGHTS • DITCH, FOG & SPOT LIGHTS • DIRECTION SIGNALS
TRUCK FLARES • REAR VISION MIRRORS • FLOOD LIGHTS • CATAPHOTE REFLECTORS • FIRE EXTINGUISHERS

You're Fired

(CONTINUED FROM PAGE 25)

accidents he has had.

The classification of accidents appears just above the name tab but does not show unless the card is turned up. Here each accident is keyed as "A," "B," "C," or "D," according to its classification. An "A" accident is one in which the vehicle was properly parked, our driver not at fault. "B" means "our car struck by the other car, our driver not at fault." In a "C" accident, "our driver could have avoided the accident," while "D" means "our driver entirely at fault."

On the back of the card are given complete details of each accident, including the date, cost to the "Star," cost to insurance company, damage payments by other driver and a brief report of the circumstances.

As accidents are reported they are immediately entered and classified on the driver's card. For details the insurance company reports are used.

IT is not the purpose of the system to set arbitrary discharge rules. We cannot for instance say that five accidents put a man out or even that so many of various class accidents put him out. Previous to the installation of the new system, the history of a particular driver was vague and often went unnoticed until something serious happened. In getting the records we went back and brought each man's history up to date. If we had had a rule saying, for instance, that five accidents put a man out, we would have discharged 20 per cent of our drivers. On the other hand, we did find some cases so bad that immediate action was necessary.

It must be remembered that it is not always the best thing to discharge a man because his driving record is poor when we have no assurance that a new man will be any better. It is expensive to train a man to our way of doing business. It's far better to try to correct

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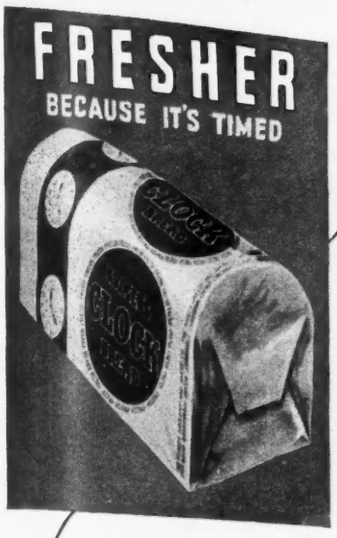

Kroger's trucks look fresher because they're finished with AUTOMOTIVE DULUX

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THE Kroger Company takes pride in the purity and freshness of "Clock" timed bread. And the Kroger Company takes pride in the fresh, sparkling appearance of its trucks, too.

Kroger trucks are finished with DULUX, because DULUX saves money. This amazingly durable finish cuts down the number of trips to the paint shop. Whether you've one truck or a hundred, you can save money by using Automotive DULUX. This durable finish stands up under hard wear and tear on the road. Its tough film is elastic and resistant to chipping and cracking. Traffic gases, oils, and greases do not mar a DULUX finish. And it's unusually easy to wash and polish.

DULUX can be applied either with brush or spray in your own paint shop. Or any Authorized DUCO-DULUX Refinisher will be glad to do it for you.

At your request, a Du Pont representative will be glad to give you further information. E. I. du Pont de Nemours & Co., Inc., Finishes Division, Refinish Sales, Wilmington, Delaware.

DU PONT
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AUTOMOTIVE DULUX

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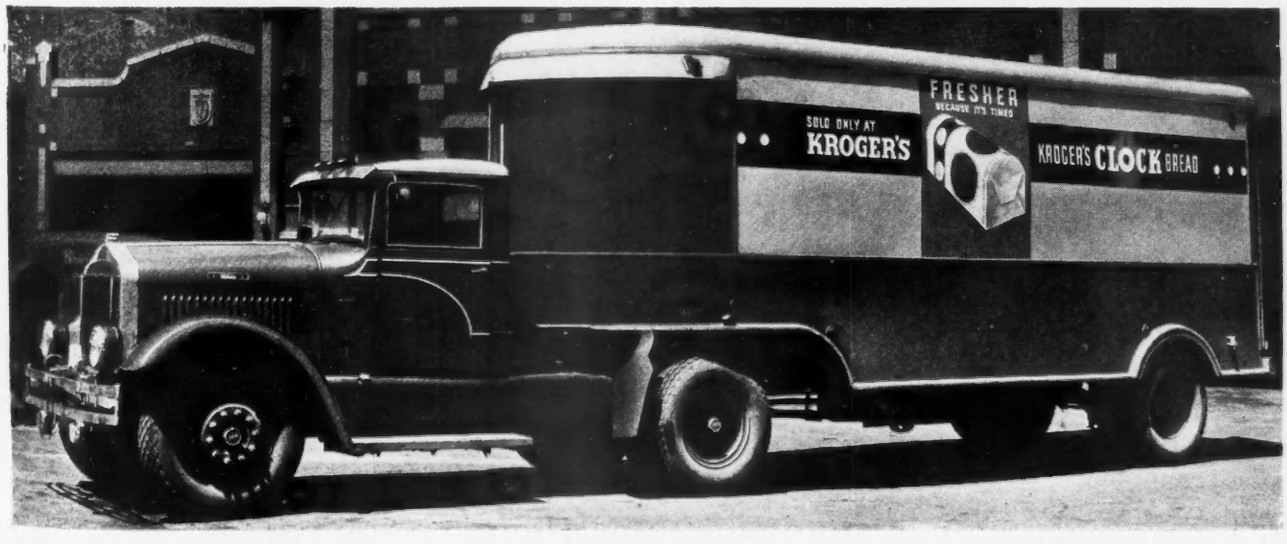

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(CONTINUED FROM PAGE 64)

the faults of those in our service if they show promise, and our records help us to do that, just as much as they help to determine the firing point.

We do, however, maintain certain rules that make a man subject to dismissal. If a man's personal habits make driving unsafe, he is subject to dismissal. If he is involved in one "D" accident or three "C" accidents, he is subject to dismissal. But even these cases are subject to final considered judgment.

From October, 1936, to August, 1937, six men were dismissed on the basis of their personal record. For the most part, they were heavy repeaters. One man had 17 accidents, another 13 and two had eight each. One man's record showed five accidents in as many months, and one had only one accident but clearly in the "D" classification.

ANOTHER important function of the system is the classification of all accidents made possible by five summary cards. The first, entitled "Action of Drivers Resulting in Accidents," specifies whether the accident was caused by lack of turn signals, passing on a hill, out-driving his vision, etc. The second card shows the "Road location of accidents"; card three, "Accidents by age groups." Incidentally the record to date shows the older men are better drivers. The fourth summary is a chronological list of all accidents showing the date, name of driver, car number, cost to "Star," cost to insurance company, and brief details of the accident. The last card gives comparative accident data for the entire fleet showing, by months, the number of units and miles run, and total number of accidents.

By this ready comparison with the previous year's record, the fleet as a whole has shown marked improvement during each month that the plan has been in operation.

We take our traffic accidents seriously. We consider safety work important in lowering maintenance and operating costs. Many fleets are still paying out enormous insurance premiums without any idea of what is causing the excessive rates. We believe that we will be able to further reduce ours, with this system in effect. Safety work is not a game for a quitter. It's like advertising. You must keep everlastingly at it. If you don't get any results today, you have to keep pounding away at what you have to sell and we are selling safety to these drivers.

The third Tuesday of each month we hold a safety meeting. Here the superintendent or an assistant is able to give a detailed analysis of just what went wrong to cause the accidents during that month. He doesn't babble away at a lot of things that never happened. He can go to these men and say, "We had five accidents this month, three of them came from not giving the proper turn signal, two of them from passing on a hill." He concentrates on things that are actually happening and all benefit from the other fellows' mistakes.

We believe important executives of the company should take an active part in the safety campaign, and they are present occasionally at these meetings to show the men they stand back of the safety efforts.

Naturally our plan not only points an accusing finger at the poor driver, but also automatically points an approving finger at the good driver. The man's name who has had no accident stands out at once on the visible file. To these men, and those whose accidents have been clearly in the "A" group, indicating that they were hit by another car when parked, a safety award is given each year. After a perfect record for five years, wrist watches, suitably engraved, are presented. To those whose record preclude recognition as safe drivers, we recommend earnest consideration of our slogan: "Drive Safely or You Cannot Drive for the Star."

DON'T PLAY WITH SLEET STORMS
INSTALL CASCO ELECTRIC DEFROSTERS NOW
AND BE READY FOR ALL WEATHER

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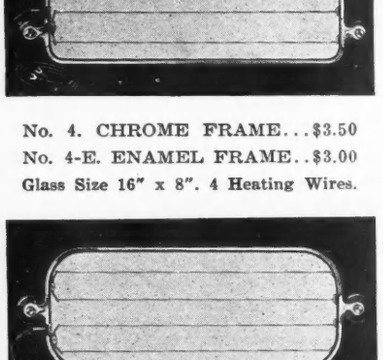
Glass Size 16" x 8". 4 Heating Wires.



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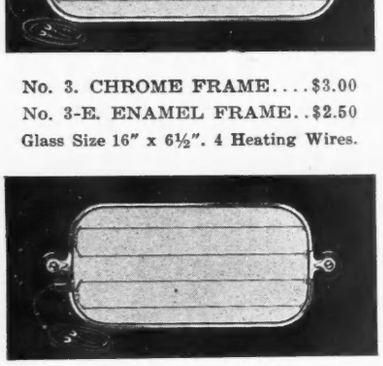

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1. CASCO Defrosters remove ice and sleet at all temperatures. Positive action for absolutely clear vision *under all conditions.*

2. They DEFROST (prevent condensation on inside of windshield) *without* use of current. This means economy. The best proven plan is to install your Defrosters on your windshields at the first sign of Winter weather and leave them on till Spring. They DEFROST at all times, and when SLEET starts, just plug in or turn on your Defroster Switch.

A Defroster is an absolute essential for safe Winter driving in unheated trucks, buses and cars, and desirable in all cars, as it is dependable for sure sleet removal *under severe conditions.*

NEW NO. 34 FAN RUBBER BLADES

6-volt $4.15
12-volt 4.40

Keep frost off inside of windshield in winter, fall and spring. Attach to steering post or on header board. Has an efficient, dependable motor, sturdy fan —attractive designed rubber blades. More air velocity—less current used.

CASCO PRODUCTS CORP. BRIDGEPORT, CONNECTICUT

Will Brokers Control Freight Haulage?

(CONTINUED FROM PAGE 27)

shipments throughout the entire United States as well as a large volume of coastwise traffic, placed considerable doubt on the status of the organization. Holding themselves out to undertake transportation to any and all points where freight or express shipments may be made and yet conducting no motor vehicle operations on their own account, the Acme affiliates entertained serious doubts as to whether, on the whole, they were common carriers or brokers. The application was therefore made in the alternate, asking the Commission to declare them to be either contract carriers or brokers if their operations were found to be not those of a common carrier.

The extent of the business of the Acme group is shown in the maintenance of leased property in 60 large cities serving as major concentration and distributing stations, with similarly leased properties in 136 secondary cities, each of such points maintaining facilities for breaking bulk, re-shipment and routing through consignments, as well as for local consolidation and distribution. At these points operating and sales organizations are maintained, with approximately 225 solicitors and general agents continuously employed. Over 2000 motor carriers contribute a gross freight revenue to the Acme group of approximately $25,000,000. affecting 600,000 tons of traffic.

TWO questions were presented by the application: First, may a certificate be granted covering only the actual motor carrier operations conducted by the group; and second, what is the status of the indirect operations conducted over the lines of other carriers.

The applicant contended that. since it holds out to the public its ability to carry tonnage anywhere and contracts to do so, it is a common carrier.

The Commission takes the view that Congress did not intend. in defining common carriers, to include forwarders not actually engaged in transportation on the highways. Recognizing. however, the force of the applicant's argument, the Commission indicates that the argument is faulty because it proves too much. If the Commission must supervise everyone who undertakes or contracts to transport passengers or property, it would probably have to supervise such operations as transferring passengers to and from airports by motor vehicle, or a water carrier operating motor trucks in port collection and delivery service. or even a railroad which may operate motor trucks or buses to supplement its rail service, all under the provisions of part II of the Act. It is emphasized that the law specifically names "common carrier by motor vehicle" in defining a common carrier which operates "on any public highway." In the case of forwarding companies the law speaks only of its "motor vehicle operations" and the Commission holds that it was not the purpose to bring within its jurisdiction, under part II, the business of express or forwarding companies. but only to make sure their *motor vehicle* operations come under regulation.

As to the 2000-odd motor carriers which perform the principal service for the Acme associates, the Commission concludes that since the Acme group has nothing to do with their management or operation and since they are all independent operators, their operations cannot be regarded as those of Acme. Holding that the Acme group must pay the published tariff rates where the services of such carriers are utilized, the Commission concludes that the definition of broker as contained in the law is functional and the status of

(TURN TO NEXT PAGE, PLEASE)

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The ability of this material to form durable graphoid surfaces on all the friction parts is responsible for its value as a wear-saver. These surfaces easily withstand the temperatures and pressures existing in an engine. They remain firmly affixed to the metal. Even raw gasoline will not remove them.

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(CONTINUED FROM PAGE 69)
the Acme group depends upon what the Acme group actually does. Hence with regard to its indirect operations the Acme group is held to be clearly a broker, and with regard to its direct carrier operations conducted through particular affiliates, such affiliates are held to be common carriers. The certificate to the group operating in the metropolitan district of New York is withheld pending further proof as to routes followed.

It is important to note that in granting a broker's license to the Acme group it is ordered to abandon joint rate and division agreements and all arrangements previously made based on the assumption that Acme occupied a carrier status. Hereafter all tonnage moving by common carrier must be carried at tonnage rates. Also interesting is the conclusion that the Commission, as to tonnage moving by contract carriers, has no direct control over the rates and charges of brokers. The decision declares: "A broker such as applicant may charge the public any rate he wishes, and regardless of how destructive that rate may be, we can do little, if anything, about it. If he is required to utilize the services of common carriers at their established rates, we may obtain some measure of stability by the exercise of our jurisdiction over such rates. But if he may employ a contract carrier under contract, the terms of which he probably can dictate by reason of his superior economic position, our only remedy is over the minimum rate of the contract carrier, which may prove to be inadequate."

Here the Commission indicates clearly its inclination to treat with a large operating unit differently from the treatment it might accord a very small operation unit. Beginning with the statement that the applicant is a large and responsible concern, the Commission calls attention to the fact that a broker ordinarily needs little more than a desk, a chair and a telephone to go into business. Also a contract carrier ordinarily has no substantial overhead. Thus the low level of charges which a broker may pay to a contract carrier may be the best bargain the broker can drive with the less responsible contract carrier. Cost of operation may not be a factor in such a deal. "The result of this type of scheme," says the Commission, "as to the stability of motor transportation, which we are directed to preserve and foster, is self-evident. If unrestricted in his relations with contract carriers, the broker would seem to be able to magnify and increase the unjust discriminations, undue preferences and advantages, and the unfair and destructive competition practices which the Statute condemns. It certainly was never intended under an act with these purposes to recognize as legitimate any method of operation which is, or may become, so anomalous and subversive as to destroy in time the motor transportation system itself."

HOLDING that in the Acme record no clear showing was made as to the extent of the use of contract carriers such as to warrant a denial of the right of the Acme to continue such use, the Commission warns both brokers and contract carriers that it is not deciding the legality of the ability of a broker to employ contract carriers, but reserves it for a later decision. The effect of the decision is to permit the continuance of such a relationship between the big Acme company and contract carriers on the theory that it is in entirely responsible hands and to keep it under observation as a basis for deciding future broker-contract carrier relationships.

It is almost unthinkable that the Commission would fail to continue intact so huge a business and such firmly es-

(TURN TO PAGE 73, PLEASE)

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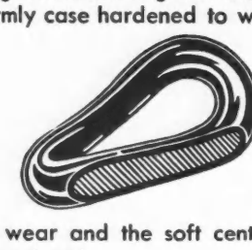
Pyrene Tire Chains have built into them every necessary feature for long wear. Starting with the highest grade wire, they are uniformly case hardened to withstand road wear.

Pyrene



The hard surface resists wear and the soft center prevents undue breakage. Longer life, less replacement cost.

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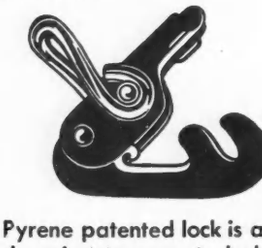

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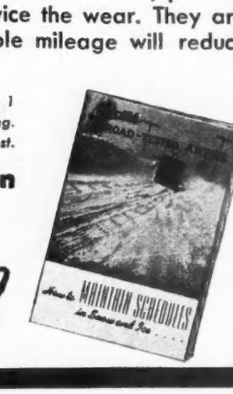

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(CONTINUED FROM PAGE 70)

tablished relations as obtained in the Acme case. Commissioner Eastman, in a separate opinion, recognizes the importance, in relation to the general transportation situation, of a forwarder controlling the volume of business controlled by the Acme group. Obviously feeling that such an organization should be under complete rather than partial regulation, and recognizing that the shipper is left high and dry where he entrusts his tonnage to a forwarder having complete control of the shipment from point of origin to destination, with nothing to say as to what carrier transports it, Commissioner Eastman would hold the forwarder to be a common carrier under the complete regulation of the Commission. Admitting that expediency may be served in designating the Acme group as brokers, he voices the fear that in the absence of complete regulation such forwarders may become very disturbing factors in the transportation situation, resulting in pseudo-forwarding companies being formed with a view to evading the provisions of the law. Holding that the argument is as potent in support of the common carrier status as that of the broker status, Commissioner Eastman would have declared the Acme group to be common carriers, if for no other reason than to bring them under full regulation.

It seems inherent in the present motor carrier situation that forwarders such as the Acme group are bound to thrive and that responsible brokers of this type may prove to be decidedly advantageous to the industry. Motor carrier groups must compete with the more firmly entrenched rails, and they do not have the advantage of long established freight and trade affiliations. Motor carriers have thus far been too busy in actually transporting freight and passengers to pay full attention to the creation of new business. Financing is in its infancy in so far as the industry is concerned. Responsible forwarders handling large tonnage may be able to more efficiently serve both shipper and carrier and thus greatly facilitate increased motor carrier loads.

As to whether or not such forwarders have a broker or carrier status is interesting only from the standpoint of the suggestion contained in Commissioner Eastman's opinion; namely, to bring such important factors in motor carrier shipping under national regulation.

National Safety Congress

Oct. 11 to 15 are the dates of the 26th National Safety Congress and Exposition to be held in the municipal auditorium, Kansas City, Mo. Some idea of the scope of the organization's work can be gained from the fact that more than 100 sessions featuring 400 speakers will take place.

Capital in Business

(CONTINUED FROM PAGE 26)

The report suggested specifically that uniform minimum standards be developed for obtaining facts of accidents, searching study of inspection services, and the necessity of expanding highway police patrols for greater highway safety.

Congress had appropriated $75,000 for the study on highway safety and traffic conditions and had asked for recommendations for improvements. The report was due June 30 but the particular act providing for the study was late in passing and the investigation did not get under way as early as had been anticipated.

ICC Report Draws Comment

EXCEPTIONS to the proposed hours of service regulations for motor carrier employees, filed with the ICC before the deadline was reached, included briefs from one trucking company, six union organizations and two state regulatory

(TURN TO PAGE 75, PLEASE)

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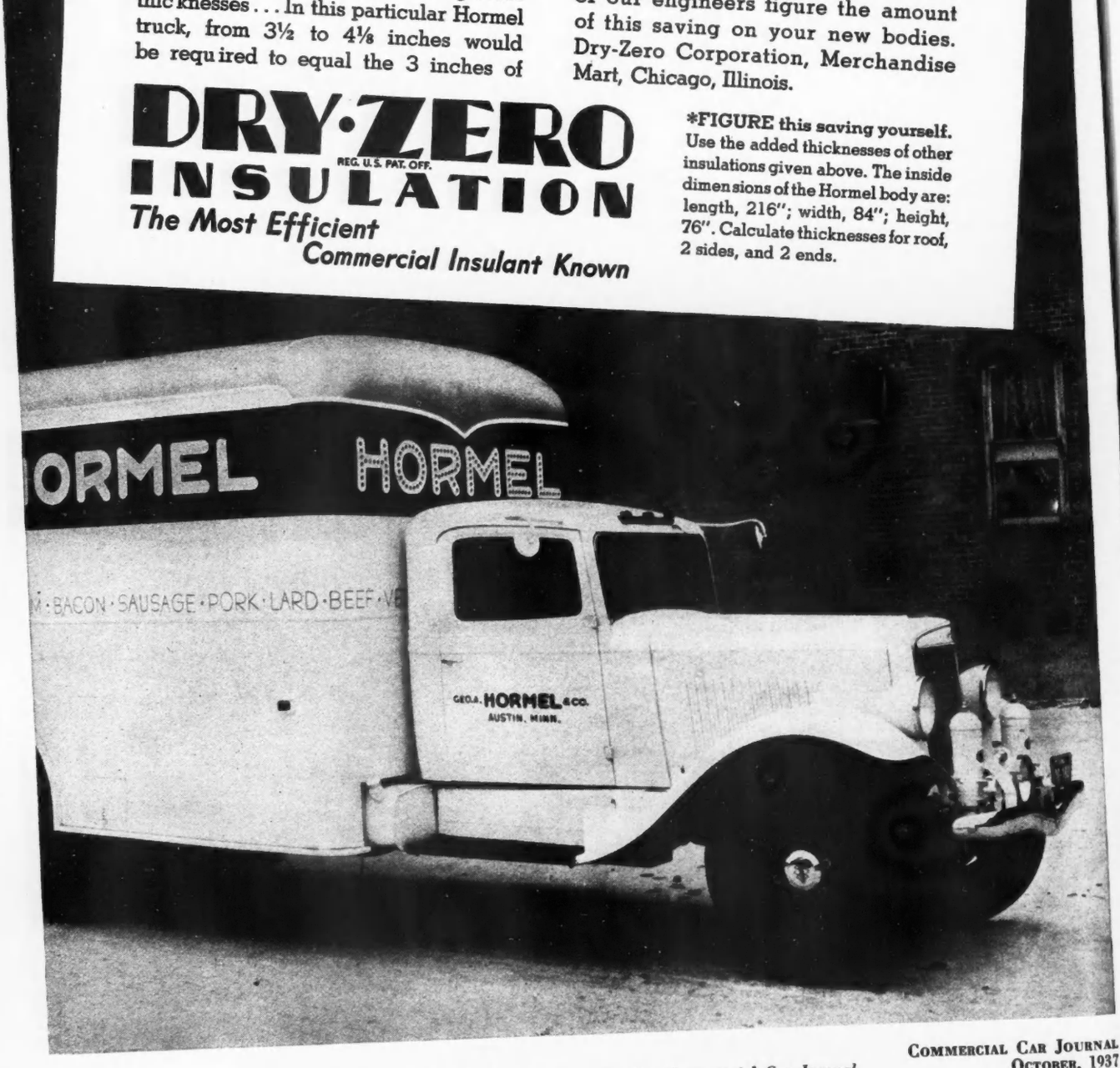

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bodies, the Wisconsin Public Service Commission and the Public Utilities Commission of Idaho. A reply to all of these exceptions was subsequently filed by J. Winian Beall, representing American Trucking Association, Inc.

Huber & Huber Motor Express Co., of Louisville, Ky., the only operator filing, urged the sleeper cab provision be broadened to make the term "berth" include "any hotel, rest camp, boarding house, or other suitable habitation equipped for the purpose of sleeping." The 60-hour maximum proposed by the Commission would, the comany reported, "work a hardship" on drivers employed on a trip basis. Huber & Huber asked that the provision be relaxed to permit hours in excess of 60 except in instances where it is shown after test that it is not in the "best interest of safety." The company also recommended that time spent on the road for rest and refreshments be deducted in computing the total hours of work.

Each of the following railroad brotherhoods filed a joint petition of exception: Brotherhood of Locomotive Engineers, Order of Railway Conductors, Brotherhood of Locomotive Firemen and Enginemen, and the Brotherhood of Railroad Trainmen. Their brief protested against the sleeper cab proposal and called it a menace to highway safety, not conducive to genuine rest, and a regulation which should not apply except under unusual circumstances. The railroad groups charged that the ICC examiner had neglected to consider the "economic factor" involved and the possibility of decreasing unemployment by reducing hours of drivers. In protesting against the 60-hour week and the rule allowing 15 consecutive hours in any 24-hour period, the railroad brotherhoods urged the Commission to adopt a maximum work week of 48 hours with not more than 8 hours each day.

FRED A. TOBIN, Washington representative of the International Brotherhood of Teamsters, Chauffeurs, Stablemen and Helpers of America, told the Commission "a joker" proviso is contained in the proposed regulations which permit drivers to be on duty 70 hours in any 8-day period. He said the 70 hours "can be worked in as few as five consecutive days." The brief reiterated the railroad union's charge of failure to consider the economic side of the picture and urged, also a 48-hour maximum work week.

Asking that his group be given another opportunity to present oral testimony in support of their viewpoint, Tobin described the examiner's description of bus drivers as an "insult." The Commission's report to which he took exception had said that truck driving could not be classified as "hard, manual labor," and that because the drivers do "little work except that involved in the actual operation of the vehicle," their employment "should be treated as a light type of physical labor."

The International Association of Machinists asked for reasonable daily and weekly maximum hours for mechanics on the ground that "long hours of service" is a "contributing cause of motor vehicle accidents." David Kaplan, the union's representative, said his group considered an 8-hour day and a 40-hour week would be "reasonable." He recommended the ICC undertake a study to determine "the effect of long hours of service" on the ability of mechanics to efficiently keep vehicles in safe operating condition.

THE Wisconsin Public Service Commission reported that adoption of the ICC proposal would result in operators, who have adjusted their schedules to the 12-hour day required under Wis-

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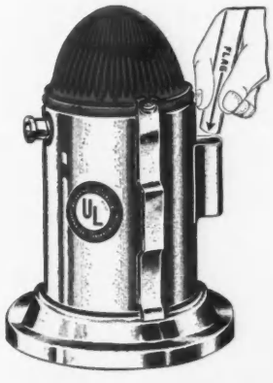
ECONOMY ANNOUNCES NEW MODEL



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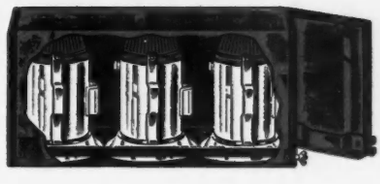

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consin regulations, reverting "to a less desirable system from which they have found it possible to advance." The brief pointed out that the Wisconsin statutes, prescribing 12 hours as the maximum for any one calendar day, provides that those 12 hours be followed by a minimum of 10 consecutive hours of rest. Sixty hours are allowed in one calendar week but out of 4 consecutive days of work, employees' hours are limited to 40.

The Wisconsin petition asked for a maximum of 12 hoors in any 24-hour period and urged that time spent in sleeper cabs be classified as time on duty. "To substitute the proposed provisions for those already in effect in Wisconsin would be a retrogressive step," the brief reported. "With respect to interstate operations the order of the ICC might be regarded by carriers as superseding that of the Wisconsin Commission."

The petition said that more stringent regulations of any state should come ahead of ICC regulations when state laws are "found to be reasonable and adapted to the physical situation of, and traffic in, the territory to which they apply."

Also asking due consideration for existing state laws where they are now more stringent than the proposed ICC regulations was the petition from the Public Utilities Commission of Idaho. The principal exceptions raised by this Commission disagreed with the statement that commercial driving was not "physically fatiguing in any way" and also with the supposition that good sleep could be obtained in berths now found in the average sleeper cab.

In complete defense of Examiner Snow's recommendations was the "reply to exceptions" filed by J. Ninian Beall as general counsel of American Trucking Associations, Inc. Noting that chief exceptions were directed against the 60-hour week and the sleeper cab provisions, Mr. Beall said in part:

"Throughout the hearings facts were diligently and successfully sought and the proposed report is in keeping with the record. No one can honestly condemn the proposed regulations or even intelligently criticize them prior to a trial under actual working conditions. The proposed regulations are adequately supported by the record. They are reasonable and workable."

Oral argument in the case has been set for Oct. 19 in Washington, D. C.

Toll Highway System

Another development on Capitol Hill of interest to motordom was the consideration of a network of "super-highways" for commercial use on a toll basis. A special subcommittee of the House Interstate Commerce Committee will be asked to consider the subject further when Congress reconvenes, according to its chairman, Representative Lea, Democrat of California. Although details of the plan were meager, Mr. Lea described the plan as providing for "broad, straight highways with a liberal number of lanes and no crossings" which ultimately would link all major industrial centers. The Congressman said the roads would be privately built.

Driveaway Service is Common Carrier

Driveaways come under the Motor Carrier Act of 1935. This is the definite opinion of Examiner A. E. Later in a proposed report to the Interstate Commerce Commission recommending that John P. Fleming, Detroit, doing business as John P. Fleming Driveaway Service, is entitled to continue operation as a common carrier by motor vehicle over irregular routes between Detroit and points in 12 states, passing through 14 states.

Strong railroad and other opposition contended such a service did not come within the ICC's jurisdiction.

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Shatterproof, dustproof and waterproof, Guide Stimsonite Reflectors are visible for 1,000 feet head-on, or 650 feet from a 30-degree angle; the lens in both three- and four-inch sizes is backed with silver plating for maximum reflection; and they carry the same assurance of efficiency, sound construction and lasting value that marks all Guide products.

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Cut the Cost of Claims

(CONTINUED FROM PAGE 23)

damages by several experts in the particular type of damage involved.

10. Decide, as impartially as possible, whether company is at fault.

11. If at fault, use damage appraisals and effectuate prompt and fair settlement.

12. If not at fault, try to convince claimant of the fairness of the company's decision, and be prepared to defend the claim.

An analysis of 519 of the most recent claims which the department has handled, indicate that about 100 of them, or nearly 20 per cent, were compensation claims of one sort or another, which we will not consider in this article. Of the remaining claims, about 5 per cent were public liability cases which involved personal injury—and in almost every one of these cases, the investigation indicated that the person injured, and not the truck or the bus driver, was at fault.

Thus, about 400, or approximately three-fourths of all our company claims were property damage cases; and about nine-tenths of these were for amounts under $50. This latter fact is of great importance to our company, since we carry our own property damage insurance under $50, and since about nine-tenths of this damage is to other than company equipment. It is this group of small property damage cases to which our department is giving special attention, through accident-prevention education of our drivers and through follow-up methods in adjusting such claims.

We insist that even the slightest of accidents must be reported by our drivers, and witnesses secured. The plan tends to keep all drivers "accident conscious," for we can never tell when an accident which might have seemed "not worth bothering with" may be "built up" by certain types of lawyers or other persons into a really serious claim. This plan is also for the protection of the drivers themselves, since in approximately three-fourths of our 400 most recent property-damage claims our drivers were adjudged, after careful company investigations, to be "not at fault."

I HAVE often been asked what kind of check we have on the property-damage accidents to our own equipment.

For a long time the problem has been troublesome, but a few months ago we devised a plan of allocating in our company garage accounting system all "maintenance repairs" seemingly due to "an accident." Previously, when a truck, tractor or semi-trailer came into the shop for P.M.S. (Preventive Maintenance Service) inspection, which includes a 44-point checkup after each 1250 miles of travel, the mechanical defects which needed repair were all listed in one group and charged to "maintenance costs."

Under the new plan the Shop Inspector marks down as "accident" any damage from a bump or a jolt which obviously was not due to natural wear and tear. A considerable number of such cases have been found. The procedure is to immediately check back and find out, if possible, which driver had the equipment when the apparent "accident" occurred; and this is possible in about 85 per cent of all cases. Then this driver is called in "to explain." Maybe he didn't report it because he had thought it was "trivial"; or that he could "get away with it"; or because he didn't want to mar his "safety record."

This plan has done a great deal to make our drivers report all accidents to company equipment, regardless of the circumstances, and further to make our drivers realize that all accidents

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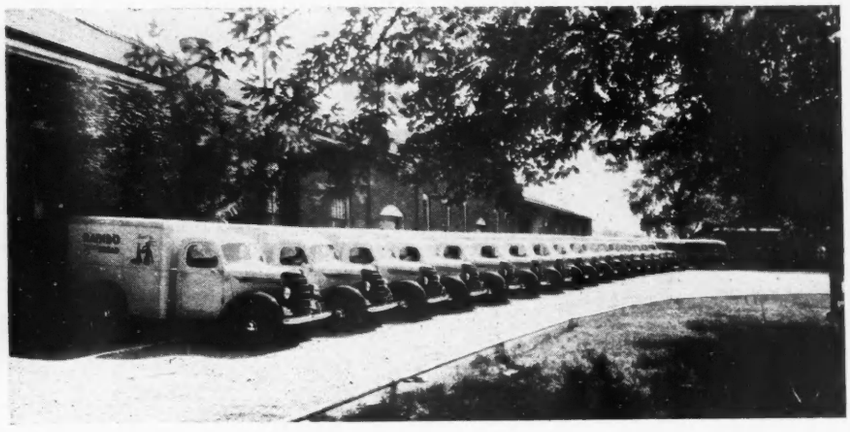

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Perhaps the finest cross-section of fleet operations you could obtain is the 365-days-a-year record of the Dairymen's League Cooperative Association, Inc., headquartering in New York City. Here is not one standard type of vehicle, but a tremendous variety of equipment including 541 transport and route delivery trucks and 226 passenger cars, traveling over 15,000,000 miles annually regardless of weather and road conditions.

Naturally, a huge tractor-trailer unit carrying 72,000 lbs. gross needs a different type of braking material than a ½ ton pick-up truck. And brake linings for the heavier tank trucks, which average as much as 400 miles daily, must be vastly different in character and construction from the lining which is required for short retail delivery haul service.

Brake linings are a mighty important maintenance item to this huge outfit. To be one of the "ACCEPTED" linings used in their shops is undebatable proof of high quality and superior performance. Thermoid Brake Linings constitute a substantial percentage of the Dairymen's League replacement purchases . . . a fact every fleet operator should consider.

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(CONTINUED FROM PAGE 78)
will be closely followed up and analyzed and responsibility placed. Proof of recent driver improvement comes through the fact that our company accident frequency rate per 10,000 miles of vehicle travel has been steadily declining. It dropped from a rate of 3.2 in January and February of 1936: to 2.2 for January this year; 1.65 in February; 1.6 in March; 1.00 in April; and 0.75 in May. This improving safety record has also been aided by such other company safety activities as the publication of our "Safety Topics" every two weeks; providing a free "party" every month for each of our Driver Groups (of about 30 drivers each) that go through a month without a chargeable accident; payment of a $5.00 prize each month for the best "safety suggestion" on a stated question; and our annual presentation of silver or gold company safety medals.

THIS checking up on all driver accidents has also had another important result—it has made our drivers more careful in their own follow-up of accidents that were not their fault. In a number of instances when a driver is called in "to explain," he is able to give information that enables us to file and collect for our company a claim against the other "at fault" party.

At every safety meeting of our drivers, the necessity of getting witness names when an accident happens is stressed. The getting of names is necessary, from the driver's viewpoint, so that accidents not his fault will not be charged against his record. This need to protect himself stimulates and helps him to gather valuable information at the scene of the accident that might be very difficult to get at any other time.

One case a few months ago illustrates the value of a witness. A company driver was going north in his truck when a passenger car pulled out from the curb without warning and crashed into him. The company truck wasn't damaged, but a fender was ripped from the passenger car. Our driver reported back that it wasn't his fault; but the only man whom he had seen as a possible witness had disappeared before the driver could get his name. With only one defending "company-prejudiced witness" the case was decidedly controversial. So our driver was urged, on his next trip that way, to canvass the neighborhood; and he luckily was able to find his witness.

Our company soon received, through a lawyer, a claim for $49 in damages. But when the signed statement of the witness came back, the witness said, in effect, that "the other automobile driver must have been asleep when he bumped into the truck." The lawyer soon called again by phone and threatened to start suit; and after the statement of the witness (without mention of the name) was read to him, the lawyer was told to "go ahead." But our company, to date, hasn't heard anything more from this lawyer.

Another case is that of a driver of a company truck who was charged by the claimant with driving at such a fast rate of speed into an intersection as to cause an accident to claimant's car. But the driver had four witnesses, all of whom replied and stated as their opinion that the "other car" was at fault, and the claim against the company was thus halted.

As soon as a driver turns in a witness name, we send a personalized form letter with stamped return envelope, together with a printed "witness statement" form. There are about 25 questions about the identity of the witness, simple facts about the accident, and a diagram to fill out. The climax question is: "In your opinion, who was to blame for the accident?" Fifty to sixty per cent of these signed statements are voluntarily returned; usually

(TURN TO PAGE 82, PLEASE)

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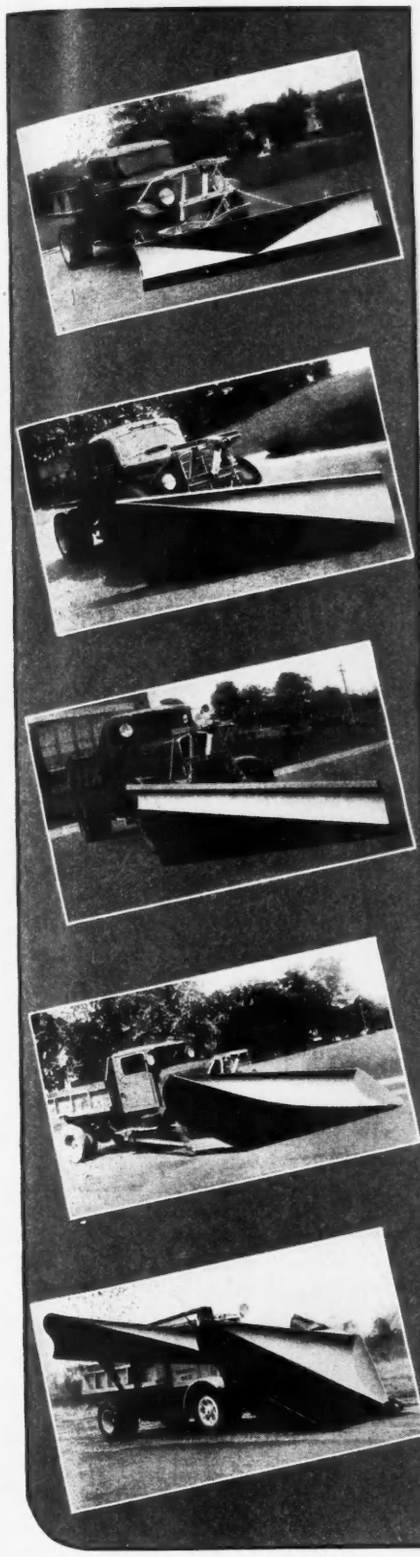

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Please send, without obligation, full information on Good Roads Champion Snow Plows

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Address _____ *City* _____

State _____ *Make of Truck* _____

Model _____ *Year* _____ *Capacity* _____

(CONTINUED FROM PAGE 80)
carefully and patiently filled out.

For each accident, the driver makes out a special statement. This includes his summary of damage to his own vehicle, "other property damage," personal injuries, witnesses to accident, and a brief statement of how it happened. If the accident seems especially important in any way, the driver is expected to telephone promptly to our office.

If the accident might involve a considerable property damage claim, or if there is *any* personal injury, or if the accident might seem so "controversial" as to who was at fault that it could be "built up" into a substantial claim, I make a point of going at once to the scene of the accident. If there is a personal injury involved, I make arrangements for a complete medical examination by a doctor qualified by experience to testify in court if necessary on this type of claim. With a small sharp-lens camera we take pictures at the scene of the accident—to show damaged equipment or other property still there: and the street setting if a traffic accident, supplemented by measurements certified to by a witness if possible. If the police are present we demand an immediate testing of the brakes of our company vehicle; to demonstrate that our vehicle is able to stop within any legally prescribed distance.

The "report of accident" which the claimant is asked to fill out, provides for general information about himself and his vehicle or other property damaged; names of passengers in vehicle and injuries; eye witnesses of accident; details of the action of the claimant at time of accident and what happened; and a statement of damages sustained and estimated cost of repairs. Getting such a statement back promptly will help to guard against a possible later "build up" of the claim.

THERE are times when it pays to be "hard-boiled." In one case a hit-and-run driver who apparently was drunk bumped into a company truck and caused damages appraised at $17.65. and our company filed criminal charges The driver reported the license number against the other car owner. The man was arrested and found guilty of reckless driving, and the judge suspended his sentence on the payment of the damages claimed.

When investigation indicates that our company is at fault in an accident, it is our policy to make prompt settlement of the claim—but on a basis believed to be a fair recompense for the damage done. To assist this plan, our company has made arrangements with three repair shops in different parts of Chicago where damage appraisals and repairs can be promptly completed. Our company is also prepared to do certain kinds of repairs, such as truck repairs, in our own maintenance department. This arrangement undoubtedly has kept down the costs of property damage claims.

As an example of how property damage claims may be exaggerated, a company unit was involved in an accident outside of Chicago and bumped into the left rear of the car of a salesman. Our company realized this to be a just claim, but we were surprised by an estimate from a local repair shop which listed the necessary repairs at about $200. Since the claim might involve "loss of use" by the salesman, I hastened with my camera and our truck driver to the garage where the car was taken after the accident. There I found that the listed repairs included not only the damage to the left rear of the salesman's car, but also damages to the right front and other sections of the car which could not possibly have been damaged in this accident. A personal investigation proved that the right front damages were decidedly old, and pho-

(TURN TO PAGE 84, PLEASE)

3 ADJUSTMENTS feature this NEW DRIVER'S SEAT PEDESTAL
NO. 575716
This new seat pedestal is particularly adapted for delivery trucks of the cab-over-engine type, where the driver's space is somewhat restricted. Complete swivel action to permit driver to swing under the wheel is secured by releasing a convenient catch; the height adjustment is 1½ in.; and the seat may be moved a total of 3 in. backward or forward. Provides an inexpensive pedestal for other applications also.
AND here is a NEW ROUND CORNER HINGE
The new No. 5816 Full-Swing Round-Corner Hinge, for bodies with 2 in. corner radius, features a minimum projection at the side of the body with a full swing for doors. When door is shut the hinge presents a closed, streamlined design of most attractive appearance. Sturdily built for hard service.
EBERHARD MANUFACTURING CO.
Division of The Eastern Malleable Iron Company
CLEVELAND, OHIO
NO. 5816
EBERHARD MALLEABLES
For ADVANCED DESIGN and MODERN STYLING
SEE YOUR JOBBER OR WRITE FOR NEW BULLETIN No. 127
E

The DeCamp Traveller

DeCamp Lines use Packard FOUR-FORTY spark plug wire. Their efficient Maintenance Division is a Bus Transportation award winner.

GETS 4 TIMES THE MPR*

* Miles Per Replacement

. . . *with* PACKARD 440 SPARK PLUG WIRE

When we told you that Packard FOUR-FORTY *eliminates one replacement out of every three*—we knew it was a conservative estimate. Now along come DeCamp Bus Lines, winner of the Bus Transportation Silver Award, with a record of having eliminated *three* cable replacements out of every four. In other words, they found that Packard FOUR-FORTY gives them *four times* the cable mileage they were getting with the old-type lacquer-finished wire.

Cut yourself in on this important saving—install Packard FOUR-FORTY on your equipment, and save money. Packard FOUR-FORTY is the cable with the inorganic, secret-formula sheath . . . your guide to more MPR. Order from your Packard jobber. Packard Electric Division, General Motors Corporation, Warren, Ohio.

saves MONEY
adds POWER
gets RESULTS

Packard
REG. U. S. PAT. OFF.
TRADE MARK

THE STANDARD WIRING EQUIPMENT OF THE AUTOMOTIVE INDUSTRY

(CONTINUED FROM PAGE 82)
tographs were taken. The salesman then acknowledged that he had previously collided with a tree, which explained the origin of this "old damage." The claim was settled for $75.

There are times when it may be advisable, in handling special property damage claims, to get estimates from outside specialists in these types of claims. For example, damage to building drain pipes, low hanging doors, and fire escapes. Such experts may discover that there was previous "old damage" for which the company is not responsible; or maybe that the damaged fixture of the claimant was illegally suspended or located, according to the city ordinances, hence no company responsibility.

In making adjustments, it is the policy of the Willett Co. to keep our settlements on a strictly fair and impartial basis, since the claimant may be a present trucking customer or a potential customer, or associated with other persons or companies who are customers or possible customers.

We also apply this policy to the lawyers for the claimants. Even though a few of such lawyers may be in or near the "ambulance chasing" class, yet it is a cash loss to them to engage in a case which they have no chance of winning. Hence, if our company sincerely believes that we were not at fault in an accident, and if we have witnesses and strong facts substantiating our position, any lawyer will have respect for such evidence. At least three-fourths of the claims in which our company has had such a defense, and when we were willing to defend a suit on that basis, have been eventually dropped by the claimants or their legal representatives.

TRUCKTOR

FOR 6-WHEEL HAULING WITHOUT DEADWEIGHT LOSS

WHY PAY FOR DEADWEIGHT THAT EATS UP PROFIT?

SIX-WHEEL trucks and Tractor-Trailers are the two types of vehicles that haul the heaviest motor loads of industry.

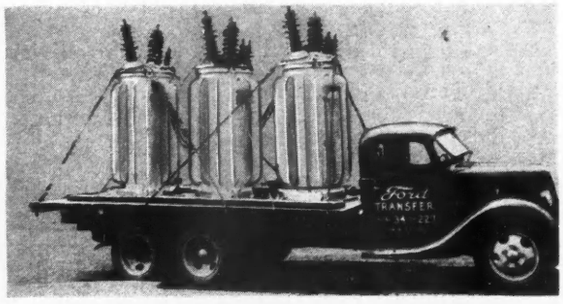
The Six-Wheel truck, compared with the Tractor-Trailer, will haul an equally heavy load — costs no more, generally less—compares favorably in operating and maintenance costs—and is faster in traffic.

A Tractor-Trailer of same capacity as a Six-Wheeler weighs ¼ to 1¼ tons more, due to weight of fifth-wheel structure, landing gear and extra length. For this deadweight of parts there is no offset advantage where detachability is not utilized — as on many long run operations. Whether figured as a sacrifice of possible payload or as excess burden hauled on a per-mile basis, the total cost runs into thousands of dollars during the trailer's life.

SAFETY is a factor, too. Insurance companies charge rates 25% or more higher for tractor vehicles than for Six-Wheelers.

WHY Tractor-Trailers when detachability is not required? Ask us for economy hauling performance data on Trucktored Six-Wheelers.

SEE TRUCKTOR AT NATIONAL MOTOR TRUCK SHOW, NEWARK, N. J., NOV. 6-12



THE TRUCKTOR CORPORATION • 156 WILSON AVE., NEWARK, N. J.

Ability Factor Comments by For-Hire Operators

(CONTINUED FROM PAGE 19)

MOST interesting facts in the 51 replies from for-hire operators are that 38 consider a slow-moving vehicle a safety hazard on hills; 39 favor the adoption of an ability factor to make trucks move faster on hills, and that 39 believe that speeding up of trucks is also imperative from an economic standpoint.

Viewpoints were freely expressed by for-hire operators regarding the speed of trucks.

"In our state the legal limit for heavy equipment is 25 m.p.h.," said one operator. If the law were amended to permit 40 m.p.h. it would be to our advantage to use larger powered units which would combine the speed necessary for the hills and also for the level. On a 150 mile run we could cut about 1 hr. from the running time and this might be to our advantage if the hour situation continues to be as troublesome as it now is."

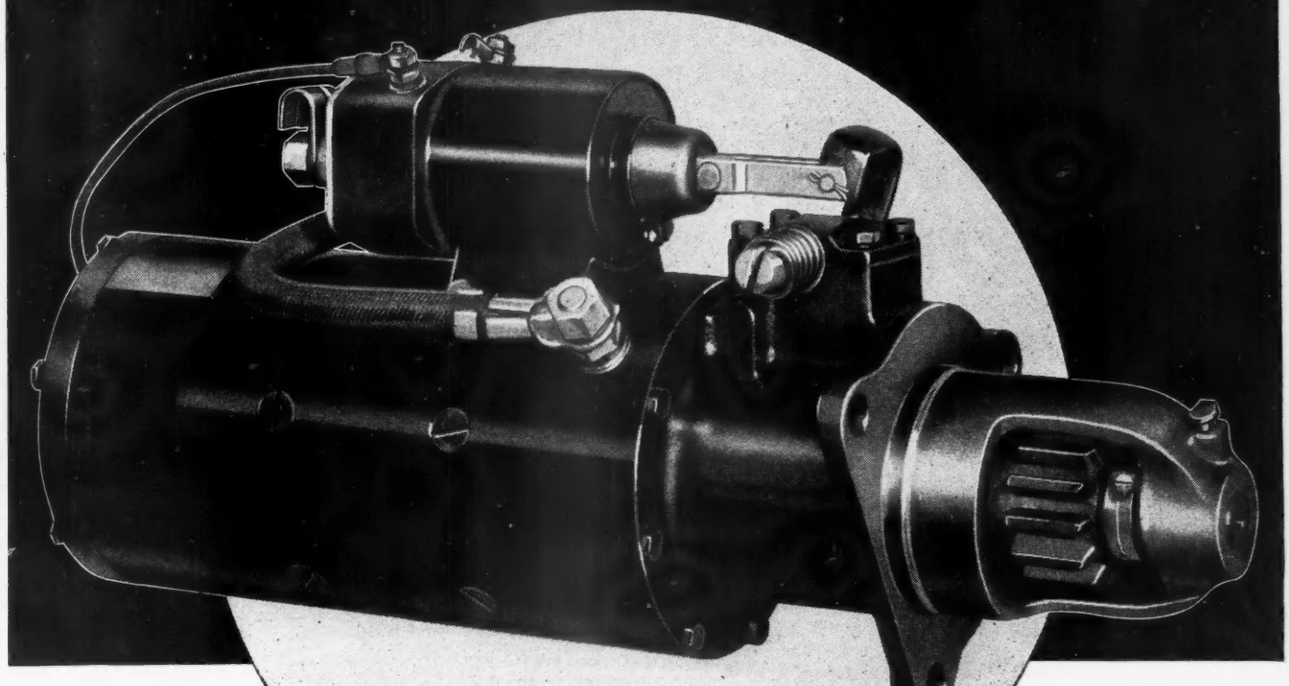
Said another: "There are a number of reasons for a little more speed, or rather a little faster moving equipment, namely, the driver costs and a better public relation with the passenger car driver on hills and on the level also. We in Wisconsin are trying to get the good will of the public by not delaying traffic on the public highway."

An Illinois operator, responding to the question, "Isn't it economically imperative to speed up trucks?" said: "Yes, we are doing this right now."

SEVERAL operators felt speed was not the solution for the economic problem. "Other factors," said a Pennsylvania carrier, "such as routing of loads, better cooperation of labor, receiving and delivery of loads by customers will be a greater help." A Chicago carrier said: "I believe the slow-driver hazard may better be met by other means—

(TURN TO PAGE 86, PLEASE)

Delco-Remy
STARTING MOTORS
A Complete Range of Sizes—Light-Duty . . . Heavy-Duty



Illustrated is a new 20-h.p. Delco-Remy starting motor for engines up to 1,200 cu. in. displacement.

There are Delco-Remy starting motors to meet every starting need. From the smallest passenger car motors, to heavy-duty units with Dyer Drives for Diesels and the larger gas engines—the range is all-inclusive. Based on positive, safe transmission of power in cranking every type and size of engine, Delco-Remy starting motors set a record for high performance with commercial vehicle operators everywhere. This record is so well established, and so faithfully maintained through sound engineering and precision manufacturing, that commercial car operators are assured of dependable performance from all Delco-Remy starting motors.

Delco-Remy
ANDERSON, INDIANA

UNITED SERVICE MOTORS

Service and parts for all Delco-Remy units are available through Authorized Distributors and Electrical Service Stations of United Motors Service everywhere—wherever you see this sign.

World's Largest Manufacturer of Automotive Electrical Equipment

(CONTINUED FROM PAGE 84)

routing, wider pavements on grades, better patrol systems, more consideration for faster traffic by truck drivers, etc."

"Increasing average speeds would undoubtedly increase earnings," observed another Illinois operator, "but this may result in additional accidents and that could better be avoided by three or four-lane travel."

An operator from New England was dead set against any kind of ability factor. "A slow truck should never be considered a hazard," he said. "It is the speedy trucks that cause practically all the accidents. I do not favor any set ability factor, and that despite the fact that we have practically a fleet of new trucks capable of meeting any reasonable ability factor."

After four years of supervising equipment and personnel, investigating several hundred accidents, and driving several thousand miles observing trucks on the highways, it is the opinion of an Ohio respondent that "slow moving vehicles do create a hazard on hills but the hazard created would not amount to a great deal if the motorists as a whole would show the proper consideration."

AMONG the opinions sent in for tabulation this month by operators other than common and contract carriers, two were unusual in their discussion of the ability factors favored. A Washington fleet, that favored 6 per cent grade ability at 20 m.p.h., said:

"In the mountainous sections of the country where there is as much as 20 miles of continuous 6 per cent grade, the ability factor I recommend is none too high, although for other sections of the country I realize this ability factor is very great. This ability factor I believe could be based on a torque versus gross load basis without undue 'red tape.' The manufacturers could stamp the truck torque rating the same as serial and motor numbers. There is no reason why the ability rating could not be made through legislation the same as solid tires were gradually changed to pneumatics and without causing hardship to the owners."

The solution offered by an Ohio operator was: "Larger motors with overdrive transmission or dual ratio in differential. This would allow trucks to go up hills faster in lower gears and still be economical to operate on level through overdrive. Would recommend that motor be governed at 2800 r.p.m., unless motor manufacturer recommends otherwise. Too many present day trucks use converted passenger car motors geared very low for power which makes it very slow in pulling up hill and expensive to operate due to the high speed which the motors are turning over. Drivers of this type of equipment when driving over rolling country often hold their trucks wide open in going down hill until the motor races and ceases to pull, then put it in neutral and let truck coast as fast as it possibly can. This gives them quite a bit of momentum to pull the next hill. This is a dangerous practice both to the driver and the motoring public and costly to the operator and often the cause of break-downs and road delays."

EDITOR'S Note: The ability factor discussion will be continued in the December issue. The November number will be the 1938 Highway Transportation Show and, as such, devoted entirely to highway transportation equipment. When we take up the discussion again we hope to have the opinions of western for-hire operators. We will also publish some of the unsolicited contributions that we have received, and a chart which will enable any operator to determine whether his vehicles can meet a 4 per cent at 20 factor.

Safety Insurance for Trucks

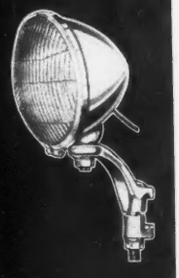
FOGLITES

TIGER-EY REFLEX FOGLITE

A foglite when on—but a dependable reflex signal when light is turned off. Tiger-Ey principle makes parking safer and indicates true location of vehicle on road even though bulbs might be burned out.
List price $4.00

BRIGHT RAY FOGLITE

This deluxe model throws a broad beam through thickest fog, sleet, snow, and rain. Truck-built throughout with malleable iron bracket and a special processed amber lens.
List price $4.25



DO-RAY

PROTECTIVE LIGHTING DEVICES

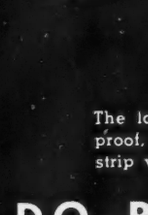
FLUSH TYPE CLEARANCE LAMP

The huskiest and most efficient of its type. One-piece steel with specially designed lens.
List price 55c

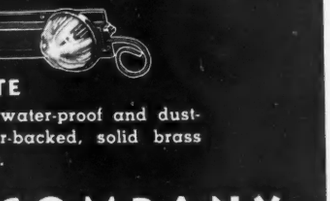
ANGLE BRACKET LAMP

A particularly adaptable and useful lamp. Sturdily built with reinforced steel bracket.
List price 35c

SUPER FLARE KIT



More than meets I. C. C. and State regulations. Burner cap protects flame from rain, generates maximum flame with minimum of fuel. List prices:
Super Flare only.....$1.00
2 Flares in metal box..... 3.25
3 Flares in metal box..... 4.50



THREE-WAY LITE

The last word in reliability, this lite is water-proof and dust-proof, with a patented positive, rubber-backed, solid brass strip wiring assembly. Ask your jobber.

DO-RAY LAMP COMPANY
1458 South Michigan Avenue
CHICAGO ILLINOIS

Don't Let a BLIZZARD Put You In Cold Storage

Winter is "just around the corner" and it *may* be a hard one. If a heavy blizzard should strike your locality suddenly—as blizzards often do—would it put your fleet in "cold storage"? Can you rely entirely on the snow clearing facilities of your community, or would it be wise to supplement them with your own powerful WALTER SNOW FIGHTER?

The Walter Snow Fighter is not merely a four-wheel drive truck—it is the only one that has a *Four-Point Positive Drive*, and with correct automatic differential action between all wheels, front and rear, right and left. It is the only truck that maintains the positive driving action on all four wheels, when it is needed most, namely, slippery ice and snow covered highways. This "surefootedness" is found only in the WALTER.

For snow removal, for opening a road quickly, under the most difficult conditions, Four-Point Positive Drive is essential. When a WALTER hits a dense snow bank, something must give—and it will not be the WALTER. It looks like an explosion when this concentration of perfectly balanced power plows into a mountainous snow drift. That is how the WALTER earned the name DYNAMITE ON WHEELS.

Send For Literature

WALTER MOTOR TRUCK CO.

1001-19 IRVING AVENUE
RIDGEWOOD, QUEENS, L. I., N. Y.

When writing to advertisers please mention Commercial Car Journal

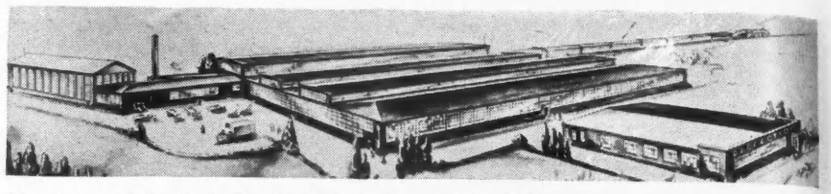
NEWS

(CONTINUED FROM PAGE 46)

EXPANSIONS

KLEMM Automotive Products Co., Chicago, has announced the opening of a new warehouse in Seattle where a full line of the company's products will be carried under the supervision of The Snow Sales Co., Klemm representatives for the Northwest.

THE LINDE Air Products Co., has opened a new sales office in Oakland, Calif., which will supplement the work of the existing San Francisco office.



New home of the Perfection Steel Body Co., at Mansfield, Ohio, is ready for use, having been completed in record time by the F. & Y. Construction Co. of Columbus. Nearly twice the former floor space is supplied in the modern day-light, fire-proof building.

AC SPARK PLUG division of General Motors has opened a new regional sales office in Philadelphia. John C. Hines, formerly regional sales manager at Flint is in charge. The Flint office has been transferred to Cleveland.

Sidney Corbett, although confined in his room at Ford Hospital, has been much in the news of late as the author of the book, "The Cruise of the Gull-Flight". He will be remembered by the industry as former manager of truck sales for Chevrolet. Kathryn Cravens is his interviewer.

M. E. Nicklin who has resigned his position as export sales manager of the Waukesha Motor Co. and is returning to the oil industry as assistant to W. C. Ramsey, manager of the machinery division of Oil Well Supply Co., Oil City, Pa.

Max Hofmann, who now assumes the position recently made vacant by the resignation of Mr. Nicklin. He joined Waukesha in 1926, coming from the Argentine branch of Korting Brothers, German Diesel engine manufacturing firm.

John A. Robinson, who has joined the Elco Grease and Oil Co., Cleveland, as sales manager. Mr. Robinson has been an original equipment representative of the Timken Roller Bearing Co., Canton, Ohio, for the past several years.

BRUCE PUFFER, formerly sales manager of the Industrial Alcohol division of the American Distilling Co., has joined the sales department of Commercial Solvents Corporation, New York, as a result of the recent transfer of the American Distilling Company's industrial alcohol business to Commercial Solvents.

TRUXMORE

WORLD'S BEST 3RD AXLE

Here's What **TRUXMORE** *does*

for a LUMBER Company*

Carries 2 payloads in one.
SAVES 60% on Insurance.
SAVES 50% on Tires.
SAVES 20% on Running Time.
SAVES 25% on Total Operating Costs.

If you haul 5 tons or more TRUXMORE can SAVE you money too!

* For first hand on the job information about these savings, write to WEST SENECA LUMBER CO., 2040 SO. PARK AVE., LACKAWANNA, N. Y.

TRUXMORE *is made in 5 sizes to fit all trucks*

DISTRIBUTORS IN PRINCIPAL CITIES

New York
Syracuse, N. Y.
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1791 FILLMORE AVE.
TRUCK EQUIPMENT CO. INC.
BUFFALO, N.Y.

Chicago, Ill.
Philadelphia, Pa.
Pittsburgh, Pa.
Boston, Mass.

"TAILOR-MADE" TO END VALVE TROUBLES

Each Toledo Aerotype Valve is individually designed to meet the valve requirements of the particular motor for which it is recommended. These highly specialized heavy duty valves are made of Silcrome-X, the latest in heat-resisting valve steel, with Stellite applied to seats and stem tips.

All this means that Toledo Aerotype Valves will stand up longer, even under the most severe conditions, and that they will improve motor efficiency and eliminate costly delays for valve repair.

Install Toledo Aerotype Valves in your trucks or buses. Specify them for your next valve job. Your jobber has them in stock or can obtain them for you on short notice.

THE TOLEDO STEEL PRODUCTS COMPANY, TOLEDO, OHIO, U.S.A.

Atlanta, 279 Ivy Street, N. E. » Boston, 702 Beacon Street » Chicago, 1225 South Wabash Avenue » Cleveland, 2209 Ashland Road » Dallas, 2805 Commerce Street » Detroit, 443 East Fort Street » Kansas City, 14th and Oak Streets » Los Angeles, 1341 South Hope Street » Minneapolis, 21 South 13th Street » New York, 17 W. 60th Street » Philadelphia, 1839 Wylie Street » Portland, 408 N. W. 12th Avenue » San Francisco, 528 Larkin Stree St. Louis, 3150 Locust Boulevard

TOLEDO
LOOK FOR THE NAME → ON EVERY VALVE
GUARANTEE
Toledo "Type S" Super-Forged Valves are guaranteed. Your Jobber will give you, without charge of any kind, a new valve in exchange for any Toledo "Type S" Super-Forged Valve which proves defective in service.

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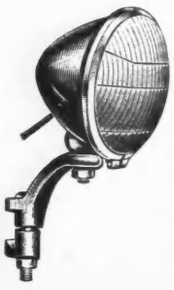
NEW PRODUCTS

(CONTINUED FROM PAGE 40)

Do-Ray Fog Light



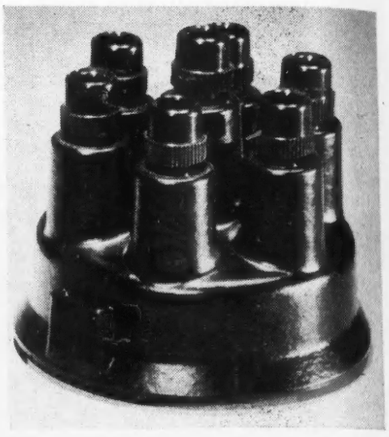
A BRIGHT RAY, popularly priced fog light that is water-proof and dust-proof and clamps securely to the bumper bar by means of a heavy-duty malleable cast iron bracket is announced by the Do-Ray Lamp Co., 1458 S. Michigan Ave., Chicago. Mounting plate is welded to the inside of the body, the size is 6¼ in. and a specially processed amber lense minimizes light absorption. The bulb is pre-focused.

Red Giant Hand Truck

REVOLVATOR CO., North Bergen, N. J., has announced a new line of Red Giant hydraulic lift hand trucks for handling unusually heavy loads. They are offered in capacities from 2500 to 15,000 lb. with a lift range from 3 to 6 in. The hydraulic mechanism is entirely foolproof and all controls are centered in the tow-bar and a foot-release lever.

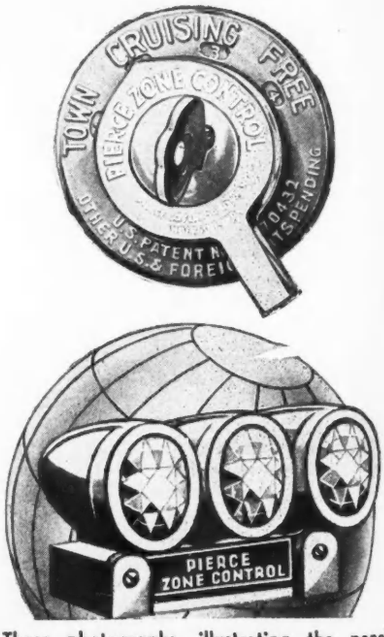
Heavy-Duty Caps

DELCO-REMY Division, General Motors Corp., Anderson, Ind., now offers three special heavy-duty distributor caps. They are molded from "XM-1000" insulating material for use under severe operating conditions and will resist burning and breakage due to moisture condensation and unusual temperatures. They are available through United Motors Service.



Preservative Dressing

VANDERBILT-OSBORNE Corp., Raymond-Commerce Bldg., Newark, N. J., has introduced a product known as F-77 Rubber and Leather Preservative Dressing. It contains Carnauba Wax, and is said to nourish and preserve rubber or leather through its protective treatment. It requires only 20 minutes to dry, and may be applied with a spray gun, brush, sponge or rag. It is supplied in Black and Clear.



These photographs, illustrating the panel control and triple-light rear unit of the new Pierce Zone Control arrived too late for use with the description which appeared in the September issue. The device is manufactured by the Pierce Governor Co., Anderson, Ind.

(TURN TO PAGE 92, PLEASE)

Warford

Warford dual axle drive Multi-wheeler equipped with Warford heavy duty transmission—Wood hydraulic hoist and body and unusually heavy snow plow equipment.

Gives Traction on 8 Wheels
Braking on 10

Warfords go anywhere, with 8-wheel traction. They stop anywhere with 10-wheel braking. They are dependable over all kinds of roads and under all kinds of conditions.

And WARFORD MULTI-WHEELERS provide amazing economies in fuel, oil and tires.

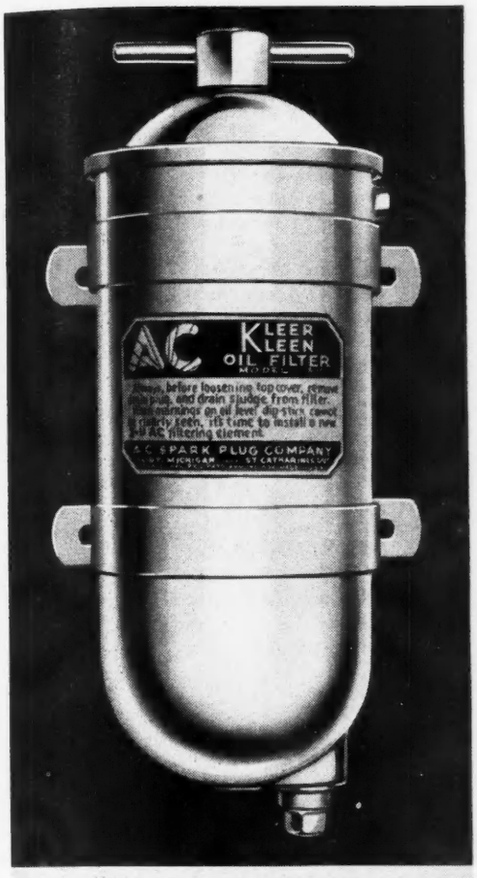
The extra gear ratios of the WARFORD Super-Auxiliary Transmission keep 10-ton loads well within the working limits of the Ford V-8 engines.

More Tons • More Miles • Less Cost

Ask your Ford Dealer, or nearest Warford Distributor to prove these facts—or write to us direct.

THE WARFORD CORPORATION
44 WHITEHALL STREET, NEW YORK, N. Y.

NO MORE DIRTY, DISCOLORED OIL



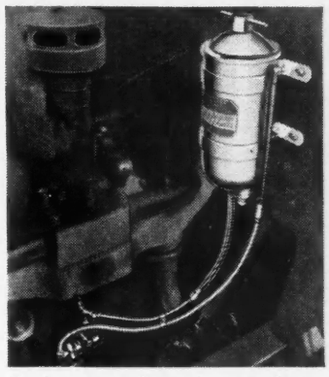
AC KLEER KLEEN

BUS, TRUCK and TRACTOR

OIL FILTER

As long as the engine is turning over, the AC Kleer-Kleen filters out dirt and abrasive and removes discoloration. Consequently, Kleer-Kleen-equipped vehicles run, all the time, on perfectly clean oil! This means *peak* economy—economy in oil consumption, economy in terms of increased oil and engine life.

Under normal conditions and with the average engine, the life of the Kleer-Kleen filtering element is 5,000 miles. It can, however, be longer. In fact, *as long as the marks on the oil level gauge stick can be read, the element needs no replacement.* So, let AC Kleer-Kleen efficiency cut oil and engine maintenance costs on all your vehicles.



Can be mounted anywhere on the engine side of the dash. Once installed, the AC Kleer-Kleen Oil Filter need never be disturbed or disconnected—even when replacing filtering unit.

Plus-Value

DESIGN AND CONSTRUCTION FEATURES

1. Keeps engine oil clear and clean always
2. Increases life of engine oil
3. Eliminates sludge
4. Cleans old oil
5. Indefinitely prolongs engine life by keeping oil clean
6. Filters 60 quarts an hour
7. Removes discoloration as well as dirt
8. By-pass built into filter—for extra safety

FILTERING ELEMENT—

1. Is replaceable, SOLID ONE-PIECE IGNEONITE—moulded by exclusive process
2. Lifts out in one piece
3. Is exceptionally efficient, according to laboratory and road tests
4. Is double ended (it can't be installed wrong)

AVAILABLE THROUGH ALL AC WHOLESALERS

Simple construction, easy to service.

NOW—3 NEW PACKAGES

BUICK • FORD V-8 • CHEVROLET COMMERCIAL VEHICLE ENGINES

•

Specially engineered for vehicles powered with Buick (all years), Chevrolet (1934 to 1937 inclusive) and Ford V-8 engines. Packaged ready for installation except copper tubing.

AC SPARK PLUG DIVISION • *General Motors Corporation* • FLINT, MICH.

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(CONTINUED FROM PAGE 90)

New Magnus Cleaners

MAGNUS Chemical Co., Garwood, N. J., has recently placed on the market two new chemical agents known as Sludgex, for purging engine crankcases, and Magnus No. 92-E, for use with steam cleaners. The Sludgex treatment consists of substituting the liquid for engine oil, idling for 3 to 4 hr., draining, flushing and refilling. The treatment is recommended every 20,000 miles and is said to keep engines entirely free from sludge. Magnus No. 92-E is dissolved in feed water for steam cleaning machines, and adds a powerful cleaning agent to the vapor.

Engine Performance Guide

LANTZ Phelps Corp., 420 Linden Ave., Dayton, Ohio, presents the "Drive Guide,"

a scientific vacuum gage designed for permanent mounting on any passenger or commercial vehicle. The device is calibrated to show most economical driving ranges, as well as an accurate indication of engine condition. A steering column clamp is furnished and hook-up to the vacuum line is accomplished through a special T-joint.

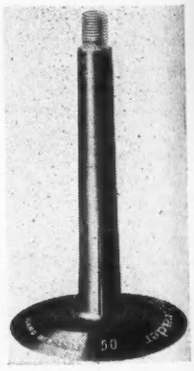
Trailer Tire

FIRESTONE TIRE & Rubber Co., Akron, Ohio, has developed a new tire specially designed for use on commercial trailers and semi-trailers. It is the first tire engineered and constructed for this type of service. The destructive factors of road crown, sag of axles under heavy load, bearing wear and uneven inflations are held to a minimum. The tread is contoured with a double radius, being practically flat in the center and flaring away on the outside ribs. This feature gives a minimum amount of movement in the center and eliminates the wiping of shoulders caused by the lateral movement of the tread when flexing under the load. Unusual silence, long life, and side-skid protection are claimed.

Ace Accelerator

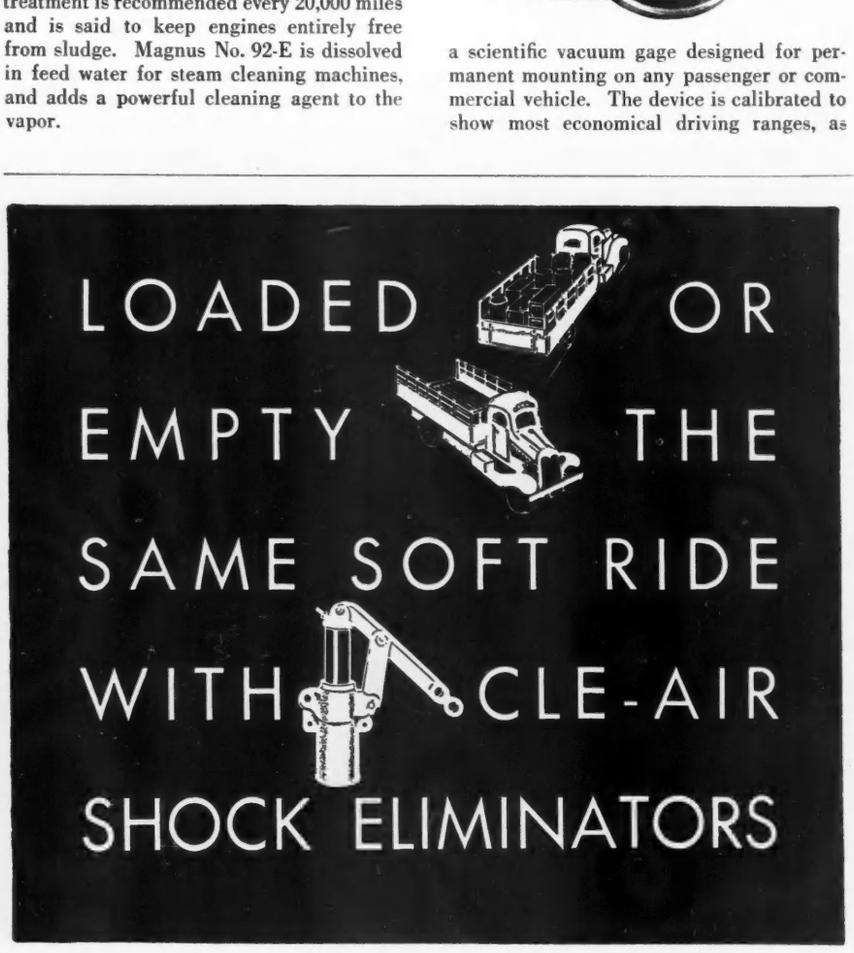
ACE Products Co., Toledo, Ohio, has recently introduced the Ace Handy Drive Accelerator. The unit replaces the conventional gear shift ball and gives complete throttle control independent of the shift lever position. Advantages claimed include ease in starting on hills, and a means of keeping the right foot free for braking in congested areas.

Hand Bendable Valve



A. SCHRADER'S SON has developed a hand bendable rubber covered valve which may be bent to any desired angle. Construction of the valve insert is of special metal tubing that will always assure correct hand bending and will not close the air passage. The base of the valve is prepared for vulcanization to the tube and it may be bent before or after it has been applied to the tube.

(TURN TO PAGE 96, PLEASE)



Employing for the first time on rear end installations the progressive resistance principle of compressed air, Cle-Air air suspension units perform the triple functions of air-cushion helper springs, shock eliminators and rebound snubbers. In other words, they do on the rear end what Cleco Gruss Air Springs do on the front end.

Your drivers will cheer for them. Your service mechanics will endorse them. Running time will be cut down. You will notice a substantial difference in cargo damage and vehicle maintenance.

Investigate these proven units and join the rapidly growing list of prominent operators adopting Cle-Air Shock Eliminators.

THE CLEVELAND PNEUMATIC TOOL CO.
Automotive-Aircraft Division
CLEVELAND, OHIO, U. S. A.

AIR SHOCK ELIMINATORS FOR TRUCKS
BUSSES, AIRPLANES AND RAILROADS

THE extra capacity of this trailer pays extra dividends on every trip, but costs nothing extra to haul. It rides in place of 2½ tons of discarded dead weight, trimmed off by lightweight design and COR-TEN construction.

In bulk transport equipment, the true measure of efficiency is the amount of payload you can carry per pound of dead weight. Here, COR-TEN construction achieves a maximum capacity-weight ratio on a thoroughly practical, self-liquidating basis. COR-TEN, by converting parasite poundage into added payload capacity, saves in hauling costs, quickly pays for itself . . . continues to produce extra revenue as long as the equipment lasts.

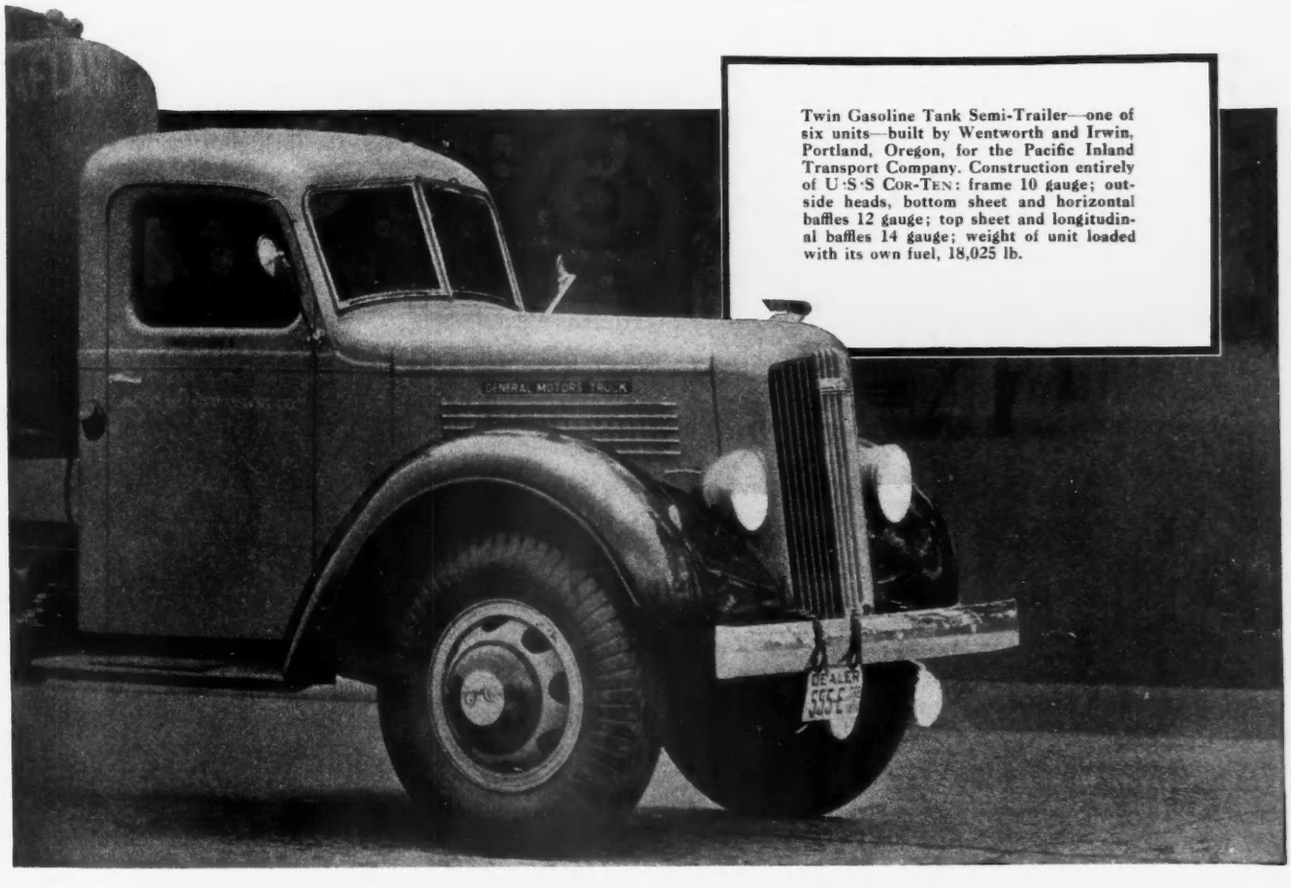
When they selected U·S·S COR-TEN, builders and operators had three objectives in mind:

THEY WANTED LESS WEIGHT — EQUAL DURABILITY. U·S·S COR-TEN gave them both. Because it has a yield point almost twice that of mild steel—because it has 4 to 6 times the atmospheric corrosion resistance, COR-TEN can be used in lighter sections, giving a weight reduction of approximately 25%, and still carry the same load—with no sacrifice of strength, safety, or service life.

THEY WANTED AN INEXPENSIVE MATERIAL—COR-TEN kept their material costs down. For COR-TEN is a low-cost, tonnage-grade steel, given its superior properties by low percentages of alloying elements. And remember lightweight construction always means fewer pounds of steel to buy.

THEY WANTED TO KEEP CONSTRUCTION COSTS LOW. COR-TEN did it. Because COR-TEN is ductile as well as strong—has working and forming qualities comparable to those of plain steel—can be fabricated by the usual shop methods. These are important considerations in construction, maintenance and repair costs.

To find out how U·S·S COR-TEN and other U·S·S High Tensile Steels —U·S·S Stainless and U·S·S MAN-TEN—can be economically applied to modernize your equipment, make it lighter, stronger, more enduring, less expensive to operate, write us. Address nearest district sales office.



Twin Gasoline Tank Semi-Trailer—one of six units—built by Wentworth and Irwin, Portland, Oregon, for the Pacific Inland Transport Company. Construction entirely of U·S·S COR-TEN: frame 10 gauge; outside heads, bottom sheet and horizontal baffles 12 gauge; top sheet and longitudinal baffles 14 gauge; weight of unit loaded with its own fuel, 18,025 lb.

U·S·S HIGH TENSILE STEELS

AMERICAN STEEL & WIRE COMPANY, *Cleveland, Chicago and New York*
CARNEGIE-ILLINOIS STEEL CORPORATION · *Pittsburgh and Chicago*
COLUMBIA STEEL COMPANY · *San Francisco*
NATIONAL TUBE COMPANY, *Pittsburgh*
TENNESSEE COAL, IRON & RAILROAD COMPANY · *Birmingham*
Columbia Steel Company, San Francisco, *Pacific Coast Distributors* · United States Steel Products Company, New York, *Export Distributors*

UNITED STATES STEEL

When writing to advertisers please mention Commercial Car Journal

(CONTINUED FROM PAGE 92)

Hypoid Gear Washer

RENSON Products Co., Conshohocken, Pa., has announced a compact washer for hypoid gears based on the proved "drain — flush with clean oil—fill" principle. The unit operates direct from the air line. Quart of flushing oil is sufficient for the average hypoid job due to the fact that the oil is ejected from a specially designed nozzle in a fine, needle-like spray. Following washing, straight air shot through the nozzle can be used to completely drain any lubricant which remains. Price $7.50.

U. S. White Tire Paint

U. S. Tire Dealers Mutual Corp., 1790 Broadway, New York, has recently developed a white wall rubber paint, which is a self-vulcanizing compound of pure rubber and white pigment. Primarily intended to keep white wall tires in trim, it may also be applied to black tires to produce a permanent white finish.

Saves Time and Steps!

No. MC-102

New
HERBRAND
ROLLWAY WORKSHOP

Consists of a complete assortment of 101 necessary tools, a removable chest and a portable workbench.

This "Modern Workshop" is designed so that it can be pushed from job to job . . . It glides along on smooth running casters, and keeps every tool within easy reach . . . No lost tools, wasted time or steps, and no more searching for misplaced tools.

The Rollway is constructed from heavy gauge steel and securely bolted for rigidity. It has a large drawer 3⅞″ deep, and a lower compartment provides ample space for bulky tools, accessories, coveralls and other articles.

Both Rollway and Chest are finished in attractive baked blue wrinkle finish, and they are fitted with nickeled locking hasps.

The Improved Magic Chest, with a 4½″ deep drawer fits on top of the Rollway and can be completely removed—thereby providing an all purpose work table . . . Jobs that would take hours of toilsome labor and hundreds of wasted steps in an ordinary shop can be handled with convenience, efficiency and greater profit in the shop that does have a Rollway Workshop.

This great Combination (No. MC-102) consists of the Magic Chest, 101 Tools, and the Rollway Bench . . . Complete, $97.70. The Rollway Workbench is 31½″ high, 24¾″ wide, 19″ deep. (Rollway Workbench, only $15.60.)

LOOK for THIS MARK of QUALITY
When buying tools, be sure to specify Herbrand, for they represent the highest quality that money can buy. If you have not seen our new Catalog No. 50-M, ask your jobber, or write us today, and remember—Herbrand jobbers are a source for every tool need.

THE HERBRAND CORPORATION ▪ Fremont, Ohio
Drop-Forged Tools Since 1881

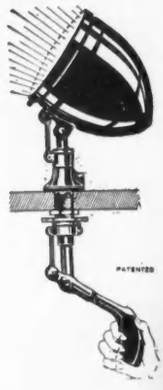
Goodrich Super Heater

THE B. F. Goodrich Co., Akron, Ohio, has announced a new heater, employing the

down-draft principle, throwing heat in four directions. Employing the most powerful passenger car heater motor manufactured, the Super De Luxe, according to the Goodrich company, throws heat four ways: to the floorboard, to the driver's feet, out the front to all parts of the car and to windshield for defroster attachments. This heads the complete 1938 line of Goodrich heaters.

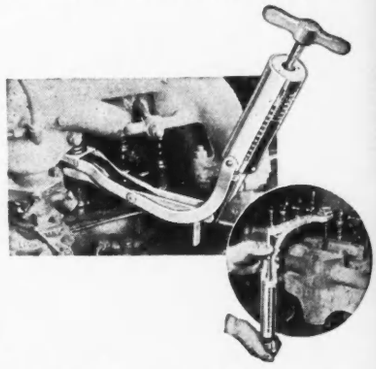
Roof-Mounted Spot

CARPENTER Mfg. Co., Sidney and Erie St., Cambridge, Mass., have recently placed on the market a spot light especially designed for trucks. Unique features are its 300,000 candle-power, one-mile ray, and the roof mounting which provides an all-round range, and a fog light with the entire beam to the right and out of line with the driver's vision.



Spring Tester

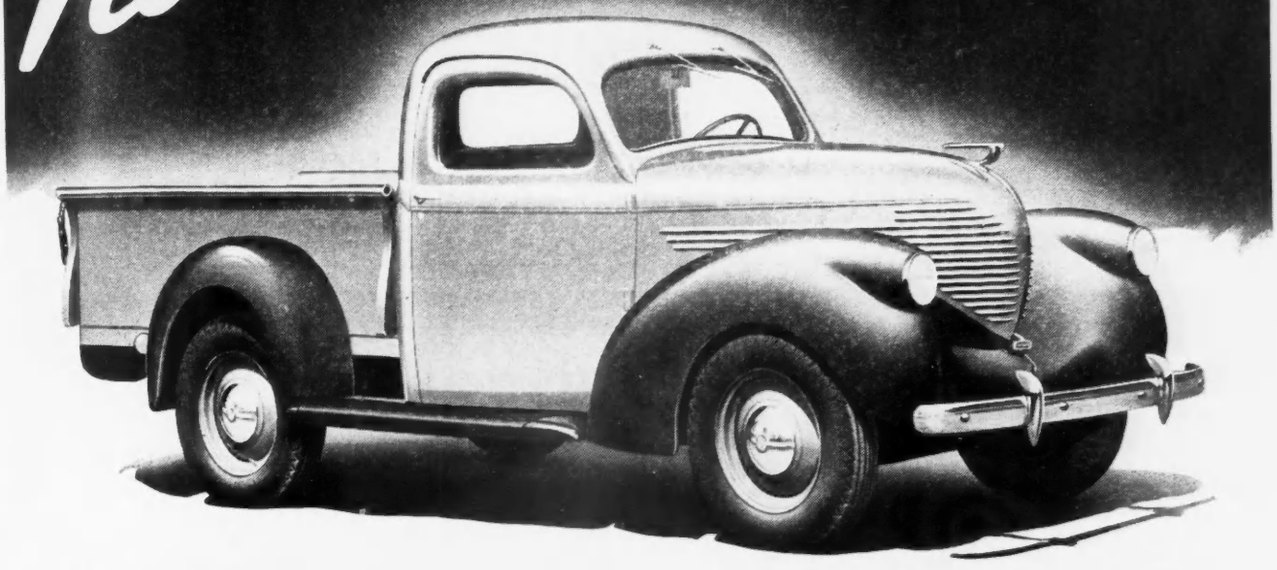
THE SUNNEN Spring Tester checks valve or clutch springs quickly, giving a direct reading in pounds. It tests valve springs in any motor without removing the head—L-head or overhead types—except Fords



and V-type motors having blocks set closer than 90°. On these jobs it is necessary to remove springs and check them in the Sunnen spring holding fixture. Sunnen Products Co., St. Louis.

(MORE NEW PRODUCTS ON PAGE 114)

A New Truck BY Willys



SAVE HALF YOUR GAS

Cut costs Increase profits!

Low Price
•
Big Gasoline Saving
•
½-ton Capacity
•
Powerful, 4-Cylinder Engine
•
All-Steel Cabs
•
Rugged Chassis
•
Heavy-Duty Truck Axle
•
Two-Stage Heavy-Duty Springs
•
Short 100-inch Wheelbase

A dollar saved is a dollar more profit—that's why the announcement of the new Willys commercial cars is so sensational—can mean so much to your business. *Save half your gas*—and save in every other cost, too.

The Willys ½-ton truck offers a heavy-duty truck axle—heavy-duty, two-stage springs—heavy rear fenders—large rims to accommodate larger tires—in fact, the entire car has been scientifically engineered to render highly efficient service at low cost.

The cab is of modern, all-steel construction—effectively insulated against heat and sound. The well-trimmed interior is roomy—ample space for three passengers. Adjustable deep cushioned seat.

Whether Willys commercial cars are used in the city or outside—by fleet owners or in individual operation, they can do half-ton delivery jobs speedily, dependably and at FAR LESS COST. Investigate NOW—figure for yourself just how much Willys can save you.

MANY BODY TYPES AVAILABLE . . . Pick-up, Stake, Canopy Top, Grain Box, Public Utility, and others.

Willys-Overland Motors, Inc. . . . Toledo, Ohio.

THE OVERLOAD

Pneumatic tires find their way to a lot of places these days, but here's the first rubber-tired "steam roller" we've seen. It's constructed of 15 Firestone tires and a load of most anything that's heavy. It's used to keep the asphalt turns in shape on the Indianapolis speedway.

Pride Takes a Ride

This department is pretty sore. And you don't need three guesses to get at the bottom of our, shall we say, discomfiture. After holding the spotlight for years in the front of the book it's a bit disconcerting, to say the least, to be thrust into the back of the book. And to be thrust unceremoniously is what bruises our pride most. "It's a publishing emergency," we were told. We talked back. We even got a bit tough. But here we are—pride bruised but spirit undaunted.

Pride Gets a Poultice

Now that we're here let's take a look around and survey the surroundings.

New LOW PRICES Make
HEIN-WERNER Hydraulic Jacks
Exceptional Values
Now is the time to equip all the trucks in your fleet with H-W Hand Jacks, and modernize your shop by purchasing H-W Floor Jacks.
This complete line includes five models of floor jacks . . . MODEL 0237J, 2 ton capacity, $29.75 (West Coast $34.50)... MODEL 0237K, with swivel wheels, 2 ton capacity $33.50 (West Coast $39.50)... MODEL 0237L, 2 ton capacity, $39.75 (West Coast $42.75)... MODEL 0337H, 3 ton capacity, $49.50 (West Coast $55.00) . . . MODEL 0324G, 4 ton capacity $57.50 (West Coast $63.00).
Truck and passenger car hand jacks include the "Bullet" Model, 1½ ton capacity at only $2.80 (West Coast $3.10) . . . Light Truck Special, 2 ton capacity, $3.70 (West Coast $4.10) . . . For light trucks, 3 ton models at $6.95 (West Coast $7.50) . . . 5 ton models $8.95 (West Coast $9.65) . . . 7 ton models $11.75 (West Coast $12.60)... For heavy trucks, buses and shop use—12 ton models, $17.50 (West Coast $18.50) . . . and 20 ton models, $30.00 (West Coast $31.00) . . . NOTE: These prices are net . . . Ask your jobber or write us for details.
HEIN-WERNER MOTOR PARTS CORP.
Waukesha, Wisconsin
FEW MODELS ENGINEERED TO DO THE WORK OF MANY
HEIN-WERNER hydraulic JACKS

Sterling MOTOR TRUCKS

DIESEL AND GASOLINE

PROOF OF PERFORMANCE

There is no better proof of Sterling performance than re-orders from owners. Users endorse every claim made for Sterlings.

Long Life
Economical
Dependable
Powerful

Engineered and built for your specific requirements.

Write today.

STERLING MOTORS CORPORATION
MILWAUKEE WISCONSIN

"Supervised Transportation"

MONARCH SINCE 1913 GOVERNORS

1st

and the last word in governors

Write for complete information — there is a MONARCH distributor in your area.

MONARCH GOVERNOR CO., DETROIT

IT PAYS TO BUY

EDWARDS
QUALITY
SEMI-TRAILERS

EDWARDS IRON WORKS, INC.
SOUTH BEND, INDIANA

Replete with modern streamlines and gleaming ivory color is this tractor-trailer combination which hauls furniture for Detroit's nomads. And according to its owners, that Chevrolet tractor with Montpelier cab-over-engine conversion has been piling up some good economy records.

Well, at least we have the consolation of being in good company—and lots of it. There's such a thing as observing the amenities and we wish the Business Manager were around to observe them by introducing us formally to these folks who seem to be pressing in on all sides to make our acquaintance. Some of these folks, we understand, are "fugitives from the short-rate gang." We are told that's an advertising expression not half as criminal as it sounds. We'll have to ask the Business Manager (we almost made the mistake of giving that title an alphabetical abbreviation) to make us all better acquainted. Maybe we can even dig up a tenor, a bass and a lead and have a quartet. This department is registered with the American Kennel Club as a baritone.

The Front from Behind

Now that we have won your sympathy it's time to settle down; there's work to be done. Boy, pass the binoculars; we want to see what's up front in this issue. We see another batch of ability factor opinions, this time from for-hire operators, and a grand summary of all the fleet operator opinions received to date. We have heard the editor say that he's planning to start the New Year with a few resolutions of his own on the subject. Shop Hints seem to be holding down the same old stand, as practical as ever. "Slip in a plug," the technical editor suggested. "What shall we say?" "Say that we'd like to be flooded with hints; that we pay $5

(Turn to Next Page, Please)

"PEEP-HOLE" VISION
Causes Accidents

ALLIANCE POWR-PAKT Windshield Defroster

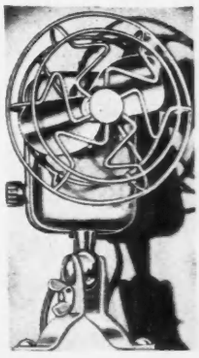
ENDS BLIND DRIVING

Watch out for steamy and frosty windshields! Give your drivers a "break"—equip your fleet with Alliance Powr-Pakt Windshield Defrosters. It means better maintenance of schedules—fewer accidents—lower operating costs.

NO STRAIN ON BATTERY

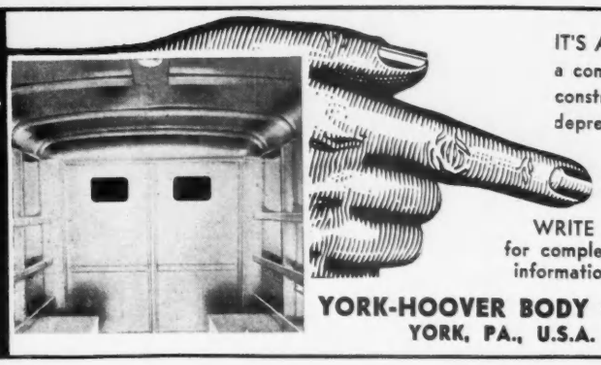
The Alliance Powr-Pakt Defroster is powerful—it delivers sufficient volume of air to keep the windshield clear at all times, yet it uses one-sixth to one-tenth the power of other fan defrosters. Does not slow down—speed is constant. Easily installed anywhere in the cab—ball and socket mounting hold fan in any desired position. Ruggedly built to give years of dependable, trouble-free service. Finished in chocolate brown enamel which does not reflect light. *For full information and surprisingly low prices, write—*

Can be mounted on windshield post or dash. Each fan also equipped with clamp for mounting on steering column.



ALLIANCE MFG. CO.
ALLIANCE · OHIO

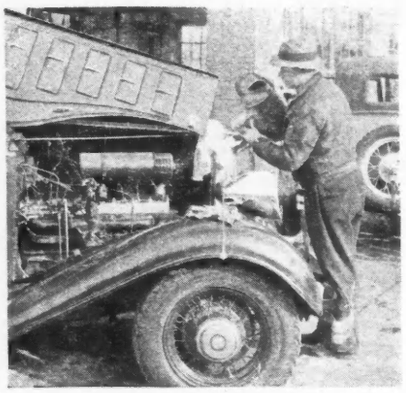
THE NEW "ALL-STEEL" STEP-IN BODY FOR RETAIL DELIVERY



IT'S A FACT . . . York-Hoover's new "ALL STEEL" body on a conventional chassis saves real dollars . . . Steel welded construction means longer life, less maintenance cost, lower depreciation . . . plus cleanliness.

WRITE for complete information

YORK-HOOVER BODY CORP.
YORK, PA., U.S.A.



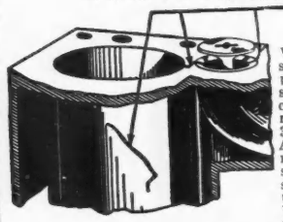
Clean Radiators Economically!

Using MAGNUS RADIATOR CLEANER, the labor and material costs of cleaning the radiators on your fleet are extremely low.
MAGNUS RADIATOR CLEANER removes rust, muck and sludge from radiators and cooling systems leaving them bare-metal clean—insuring complete circulation and efficiency of anti-freeze. Be Prepared! Write for your copy of our Radiator Cleaning Folder. It gives the whole story of how to make fleet radiator cleaning an economical operation.

MAGNUS CHEMICAL COMPANY
38 South Avenue, Garwood, N. J.

MAGNUS CLEANERS

WONDER WELD
In The Shop—
Trucks On The Road



Wonder Weld seals valve port and inside cylinder cracks permanently, in 30 minutes. A dependable repair that saves expensive engine tear downs. Write for details.

MILLER MFG. CO.
1220 Kaighn Ave., Camden, N. J.

SEALED POWER PISTON RINGS

First Choice of New Car Engineers

THE OVERLOAD

(CONTINUED FROM PAGE 109)

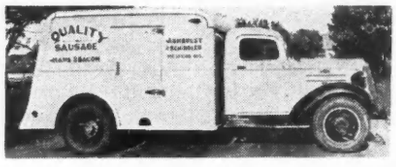
for them, and pay promptly; that we'd like to hear from the shy customers who have been holding back their ideas thinking that they're not good enough. Tell them we'd like to be the judge of their value." "Okay," we said, "we'll think it over." On second thought there's nothing more to be said.

Commotion Along the Potomac

We notice up front also that what used to be the "Washington Letter" has blossomed into a full-page feature titled "Capitol in Business." The title isn't original with us but we liked it so well and couldn't think of a better one that we are using it. The ambition of our two Washington editors is to make the feature not only newsy but analytical as well. "Will Brokers Control Freight Haulage?" falls in the class of Washington news but rates individual treatment. The author, Attorney Johnson, took the ICC decision in the Acme case and saw in it potentialities which are something for every man in the industry to think about.

Back to the Grind

We don't know why we should be telling you what's in the front of the



It wouldn't surprise us if this job made sausage meat as a by-product for it travels 150 miles a day and makes 78 stops. Jensen's Body Shop in Philadelphia made the body for Armbrust & Schindler, Medford, Wis., packed it with Dry Zero seal pads and used Metlwood on the exterior. It's a Chevrolet chassis.

NEW ALCO 4-WHEEL DRIVE

For Ford and Chevrolet trucks offers revolutionary performance features never before found—a light, fast all-wheel-drive that piles up profits for the hauler on hard runs.

For Information Write or Wire

ALMA MOTOR COMPANY
884 Penobscot Bldg.
DETROIT, MICH.

VOLT-O-MATIC GENERATOR

...Shoulders the Battery's Burden...

Write for booklet that tells how

UNITED AMERICAN BOSCH CORP.
SPRINGFIELD, MASS. New York, Chicago, Detroit

"PERFECT SEAL"
AS SPECIFIED BY
16 OF THE LEADING
CAR MANUFACTURERS

PROTECTS YOUR
HEAD GASKETS
AGAINST SEEPAGE
OF COOLING LIQUIDS

Ask Jobber or Write Factory
P.O.B. MFG. CO., Cincinnati, O.

TURN SIGNALS
Remove the Most
Serious Objections
to Larger Vehicles

SIMPLE IN OPERATION . . . .
EASY TO INSTALL . . . . . .
NO MAINTENANCE PROBLEMS

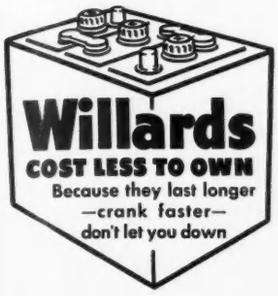
TURN SIGNAL CORPORATION
400 E. Rittenhouse St. (Germantown), Phila., Pa.

A ST. PAUL HYDRAULIC HOIST AND BODY FOR EVERY MODEL OF TRUCK

25 Years of Successful Manufacture of Hydraulic Hoists for Motor Trucks.

St. Paul
HYDRAULIC
HOISTS and BODIES

ST. PAUL HYDRAULIC HOIST COMPANY
2207 University Ave. S.E.
Minneapolis, Minn.



Willards
COST LESS TO OWN
Because they last longer
—crank faster—
don't let you down

OSHKOSH
4 Wheel Drive Trucks
A proven product. 1½ to 10 ton capacity. Write for complete information.
OSHKOSH
Motor Trucks, Inc.
Oshkosh, Wis.

KINNEAR TRUCK DOORS
Also Doors for Buildings

ALL METAL . . .
. . . . . *Coils like a window-shade, out of the way* . . . . .
CONVENIENT
BURGLAR PROOF
FIRE PROOF
MORE DURABLE
Write for Details
KINNEAR
Manufacturing Company
2100-20 FIELDS AVE.
COLUMBUS, OHIO

WANTED!
500 New, Model T Ford Headlights with Brackets
CONSOLIDATED FREIGHT LINES
INCORPORATED
Postoffice Box #3618
PORTLAND, OREGON

21 MOTOR CAR MANUFACTURERS
use Weatherhead fuel lines as original equipment. Can we give you any better proof of quality?
THE WEATHERHEAD CO.
CLEVELAND, OHIO

Toledo's department of public safety mounted a "crow's nest" ladder on a Dodge ½-ton pick-up, now speeds to the scene of trouble on a moments' notice. A parked car is no handicap for the ladder can be locked on an angle and supports the worker right at his job.

book. You've come that way to get back here and if you weren't stopped en route our artists failed miserably. So we'll pack up the binoculars and use them this afternoon to watch the unpicked winners streak by at Havre de Grace.

Lingo Slingers

The Truck Driver Lingo Contest we started last month is well under way. It really isn't a contest because the only thing competitive about it is in getting your Lingo contributions in before anyone else. To give you a better idea of what we're after here is some lingo submitted by Glenn Lattin, of Fallon, Nev.: "Snub-snoot—a cab-over-engine truck; Big hole—low gear; Shotgun herder—an inexperienced driver; Candy wagon—a light truck; Truck spinner—a driver; Commencer—electric starter; Soft-coal burner—a diesel-powered truck (Ed. This must refer to some of the old models); Skin—tire casing; Broke to lead—a truck that needs to be towed in; Tote wagon—light truck used to haul supplies in a construction camp."

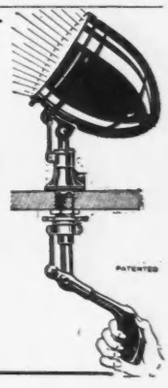
(Turn to Next Page, Please)

SPONGEX
Seat Cushions are made of live *Sponge Rubber.*
Built up layer-upon-layer into a resilient cushion which will not pack down. Upholstery holds its form over these *live rubber* fillers. Does not get flabby or show that "much sat upon" look.
Send us specifications on your next replacements or new installations.

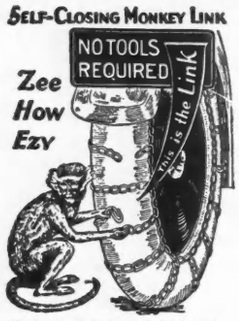
Dept. C
The SPONGE
RUBBER PRODUCTS CO.
DERBY, CONN.

A ROLL-ABOUT Groover Solves Re-Grooving Problems
Here's the way to safe, easy, and inexpensive re-grooving. Just push a Roll-About under each wheel and, without electric current, put a 1937 anti-skid tread on a 1936 tire in 5 minutes. A Roll-About requires no skill, cuts fast and clean with minimum loss of rubber. And your tires are safe and within safety regulations! At your jobber's, or write.
SAFE TOOL MFG. CO.
Dept. 100 Bridgeport, Pa.

MASTER-LIGHTS TYPE "T" for Trucks
"Just Point the Pistol Handle"
MOUNT ON CAB ROOF—WHERE LIGHTS SHOULD BE
Most Powerful and Rugged Spotlights Made
Save thousands of $$$$—Locate Signs and Numbers Instantly
AND IT IS THE FINEST FOG LIGHT EVER MADE
SOLD DIRECT TO LARGE USERS ONLY
Est. 1914 **CARPENTER MFG. CO. Cambridge, Mass.**



SELF-CLOSING MONKEY LINK



Trade Mark Reg. U. S. Pat. Office
Pat. No. 1,438,560

FREE Samples To Fleet Owners

Self-Closing Monkey Links

Write us for free samples and state how many trucks are in your fleet and what size they are. We will mail samples immediately.

Why Buy New Chains? Repair With Monkey Links

Your chains aren't worn out when the cross links start to let go. Repair with Monkey Links. Your drivers can do it on the road. No tools required. No appreciable time lost. Chains as good as new. Save money. Increase safety. Send for your FREE SAMPLE now.

Flower City Specialty Co.
ROCHESTER, NEW YORK
At All Reputable Jobbers

EVANS VENTILATING AND HEATING SYSTEMS

Are Better Engineered Better Manufactured and Priced Right

EVANS PRODUCTS COMPANY
UNION GUARDIAN BLDG.
DETROIT, MICHIGAN

WESCO Chains

more salable more profitable!

A smart line so designed that a few sizes fit 92% of all cars—cuts investment, doubles turnover, increases profit. Better chains of *all* types for cars, buses, trucks and tractors. You can make real money on this line. Write for circulars today.

WESTERN CHAIN PRODUCTS CO.
1809 Belmont Ave., Chicago, U. S. A.

(CONTINUED FROM PAGE 111)

It might be ice cream, but then again it might be a powerful dose of castor oil that you'd find inside this versatile job, for it totes both ice cream and pharmaceutical supplies, each at the proper temperature. Refrigeration is by Dole, insulation by Dry-Zero, while the body came from Batavia Body Co., Batavia, Ill.

Opportunity Keeps Knocking

From another contributor we have: "Spook—an insurance or safety spotter; Spook report—a spotter's report." While we're about it we might as well remind you that we are paying 25 cents for each word and definition accepted. Originally we asked contributions to be in by Oct. 1. That is hereby cancelled. It's open season on Truck Driver Lingo until further notice. Why not post this offer on your driver bulletin board and let the ambitious ones gather in a little extra coin?

A Fine Thing!

Six salesmen traveling Ashtabula County, Ohio, for a St. Louis stove concern made their rounds by horse and buggy. Folks who were curious learned that the boss of the stove works regarded oats as cheaper than gasoline. The salesmen said they had to take a two-week training course in harnessing and care of horses. Oats may be cheaper than gasoline but we'd give our straw hat to see the sales expense sheet for the first month of horse-and-buggy coverage.

Down the Hatch

If you have wondered what happens to the anti-freeze you keep pouring into your vehicles, the du Pont Zerone chemists have the answer after a seven-year investigation. Their motor car tests

AUTOPULSE ELECTRIC FUEL PUMP

- Uninterrupted Schedules
- Instant Starting
- Greater Economy
- No Vapor Lock
- Added Protection

AUTOPULSE CORP., DETROIT MICH.

WOOD HYDRAULIC

HOISTS and DUMP BODIES EVERY SIZE and TYPE
for every hauling job

GAR WOOD INDUSTRIES, INC.
DETROIT, MICH.
Branches and Distributors Everywhere

WAUKESHA

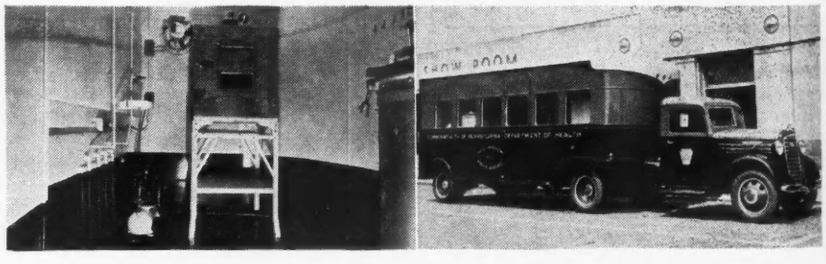
- Comet Diesel
- Hesselman
- Gasoline
- Hy-Powr
- Ricardo Head

ENGINES

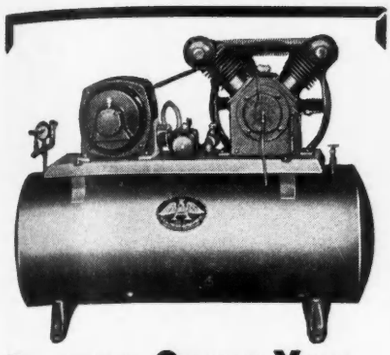
K & S OILDEX Oil Dilution Extractor AND FILTREX Series Oil Filter

Save Fleet Operators Gas and Oil Money

K & S MOTOR PRODUCTS, INC.
Hillside, N. J.



Pennsylvania's Department of Health thinks there's nothing like a little laboratory work when epidemic breaks out. So they bought a Mack Jr. tractor, had H. Kaiser & Co., Inc., Philadelphia, build this special 21-ft. trailer, fitted it complete with every conceivable type of laboratory equipment, and now roll right to the scene of action. For electricity and water, beyond the capacity of its Everdur tanks, it depends on local supply.



DAYTON GIVES YOU—

Peak Capacities! . . .
Minimum expense! . . .
Years of Endurance! . . .

Because of Dayton's 52-year record of building Air Compressors *exclusively* you get certain benefits obtainable nowhere else when you demand the "Flying A" brand. You get Dayton's power, belt and motor saving "Centrifugal Unloader"—dust-proof crank case — V-belts — Timken bearings — specialized engineering—in a range of models from 1 to 60 ft., horizontal or vertical, Single and Two Stage or V Type.

Write for bulletin, stating your needs.

The Dayton Air Compressor Co., Dayton, Ohio

One of the most complete lines in the business—each tire built to give you more miles for less money.
THE GENERAL TIRE & RUBBER CO.
AKRON, OHIO
In Canada—The General Tire & Rubber Co. of Canada, Limited, Toronto, Ontario

GENERAL TRUCK TIRES

TRUCKS
CAN'T SKID
when drivers use
LINTERN SANDERS
Distributed by
BENDIX-WESTINGHOUSE AIR BRAKE COMPANY
5001 Centre Ave., Pittsburgh, Pennsylvania

Complete almost to a Rube-Goldbergian—and we mean that as a compliment—degree is this recent creation of Transport Equipment Co., Erie, Pa., mounted on a GMC cab-forward chassis. Individually padded stalls for six horses are hung low on special full-width outriggers. But the center floor level is high providing clearance and space for a side loading ramp which slides in on roller bearings. A rear ramp swings up to form the back center section, and pivoting partitions set the champs straight on which ramp to use.

showed that 90 per cent of the losses are due to such mechanical losses as leaks, thermal expansion of the cooling liquid, forward surges due to sudden stopping, and the "after-boil" which occurs when the engine is shut down after a hard run. Our suggestion is that you take care of those losses yourself and let the "Alkosave" take care of the evaporation. If you don't know what Alkosave is, look up Evans Products advertising in this issue.

Who's Nuts, Anyway?

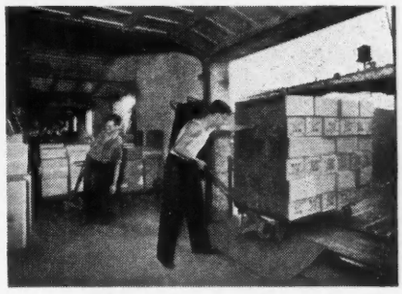
Express business, B. T. Elmore, transportation cost analyst and former I.C.C. statistician, told the I.C.C. at recent hearings, is handled by the railroads at an annual out-of-pocket loss of nearly 33 million dollars. Less-than-carload traffic in 1936, he said, was handled by the railroads at a loss of 273 millions. And this is the sort of business they don't want the trucks to have.

A Poke at T.D. Wages

Household Finance Corp. and Subsidiaries advertised recently in this fashion: "Suppose you had to live on his weekly wage—feed a family, put children through school, meet the hundred and one expenses of maintaining a comfortable although modest home. It would be quite a problem, wouldn't

(Turn to Next Page, Please)

Making one-day stands in nearly 200 cities, this summer, were 13 General Motors caravans, made up of representative GMC models from the tiny trailabout to the giant tractor-trailer combination. Public interest ran high and dealers, who made arrangements for the shows in their own cities, reported increased sales.



INEXPENSIVE SYSTEM SAVES STORAGE SPACE

Inexpensive to install and easy to operate, the Colson Lift Jack System does not depend upon additional expensive hauling equipment to produce time and money saving results. It consists of two simple units:

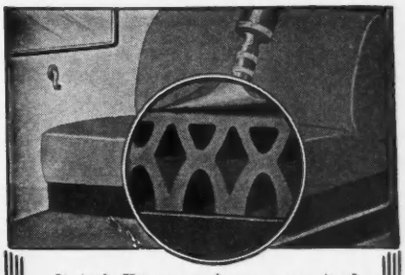
1. A platform with wheels on one end and legs on the other.
2. A wheeled jack that quickly converts the platform into a sturdy, easy-to-roll truck.

A Colson representative will show you how you, too, can cut your operating costs with this up-to-date, inexpensive, material handling system. Write for explanatory booklet.

THE COLSON CORPORATION
3700 Cedar Street **Elyria, Ohio**

COLSON LIFT JACK SYSTEM

Here's an All-Rubber
SEAT CUSHION BUILT FOR ABUSE

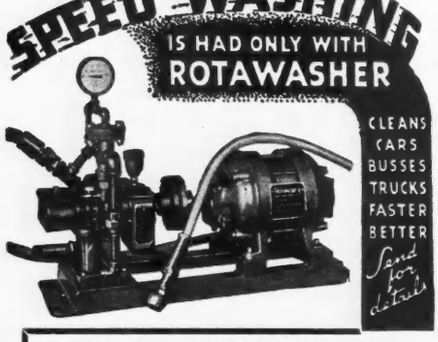


It took Karpex engineers years to develop this sensational Black Diamond seat cushion and back rest in order to meet every type of requirement. These cushions are built for gruelling, murderous duty and actually withstand the impossible. A specially processed semi-sponge rubber combined with new improved exclusive diamond grid construction guarantees extra long life, eliminates upkeep expense and helps prevent driver fatigue. There is a Black Diamond cushion designed for your truck. Get complete facts today.

KARPEX MANUFACTURING CO.
1424 E. 19th St., Indianapolis, Ind.

Slash Dollars Off Cleaning Costs!
Use New Streamline SPEED WASHING

Saves time, saves labor, saves money. That's why concerns everywhere are adopting SPEEDWASHING. Get these cost-cutting facts TODAY—send for our new Folder. SPEEDWASHING is the better, modern way—but remember



THE ROTAWASHER CORP.
122 E. St. Clair Ave., Cleveland, Ohio

"FILM on my FLEET — SO WHAT?"

So this: Your trucks may not be bright with the newness you want, nor effectively advertising the products they carry or the firm they represent.
What to do? Clean with No-Film, the cleanser that swiftly washes away dirt, road film, soap film. Water runs off in a flat sheet after No-Film (not in film-revealing drops) . . . *proof* that paint-killing film is gone.
Write for FREE Technical Bulletins NOW . . . to the Cleansing Consultants who for years have been developing paint maintenance materials exclusively for motor fleets. To the Mapor Corp., 151 W. 46th St., New York, makers of No-Film.

BEFORE YOU START—
NO-FILM
THINK OF THE FINISH

TRADE MARK
NOC-OUT HOSE CLAMPS
THE HOSE CLAMP WITH THE THUMB SCREW
Standard equipment of the automotive industry. Adjustable - one size equals many. Quick tightening, perfect seal. At all Jobbers.
Pat. No. 1,382,813.
WITTEK MFG. CO.
4305 W. 24th Pl., Chicago, U.S.A.

(Continued from Page 113)

it? Yet thousands of wage earners carry on with truck driver wages. Necessity has made them experts in money management."

A Poke at Ad Writers

Well, well. Since when are truck drivers' wages something to sneer at? Many of them collect well over $300 a month. In New York City some of them are practically economic royalists. To the ignorant fellow who wrote the ad. a good suggestion is made by Ralph Staehli, editor of the *Western Commercial Truck Review*: "Would suggest that you use the 'owners of trucks,' dealers who sell trucks, and bankers as your example in the next ad." What no editors?

Making impressive dents in an Eastern railroad's right-of-way are two of these earth boring machines mounted on FWD Four Wheel Drive trucks and recently purchased for digging 14-foot foundation holes for transmission towers. Dual tires both front and rear combined with the all-wheel-drive make the units virtually impervious to working conditions.

NEW PRODUCTS

(Continued from Page 96)

Special Duty Solder

IMPERIAL Brass Mfg. Co., Chicago, has announced a new specially developed, high tensile strength solder and all-metal flux for low-temperature soldering of aluminum, cast iron, die-cast metal, stainless steel, copper, brass and other metals. It is stated that while this solder is applied at temperatures only slightly above those used for ordinary soft solders, it forms a bond with a tensile

strength many times as great and can be used for such difficult jobs as repairing cracked and broken cylinder heads, cylinder blocks, automobile hardware, radiator grilles, radiator ornaments, carburetors and similar parts.

ARROW
DIRECTIONAL SIGNALS
FOG & DRIVING LAMPS
ELECTRIC FLARES
SAFETY EQUIPMENT
The Standard of Safety on the Nation's Highways.

Write for Catalog
ARROW SAFETY DEVICE CO., Inc.
Medford, N. J.

Eliminate Vibration With the
OHIO FLEXON Clutch Plate

Will correct such clutch troubles as clashing gears, jerky starting, vibration and clutch chattering. Flexible center and cushioned surfaces insure smooth clutch performance.
AUTOMOTIVE PARTS DIVISION
Wagner Electric Corporation
St. Louis, U.S.A.

TELL THE WORLD YOU'RE DRIVING SAFELY!
. . . is the title of a booklet every fleet owner should read. Learn how to win public good will.
Write Pierce Governor Company, 135 Ohio Avenue, Anderson, Indiana, for complete information about . . . .
PIERCE ZONE CONTROL

DeVilbiss
Spray-Painting Equipment—Spray Booths—Canopy Exhaust Systems —Exhaust Fans—Air Compressors —Hose and Hose Connections— Oil Guns.
Write for catalog
THE DeVILBISS COMPANY
TOLEDO, OHIO
Distributors or direct sales and service representatives available everywhere.

THE DEARBORN LINE
CAB OVER ENGINE
FOR FORD TRUCKS
ADDS A CAB-FUL OF PAYLOAD
The same wheelbase yields one-third to one-half more load capacity with no increase in operating cost. An easily-opened hood insures ready service accessibility.
See your nearest Ford dealer or write us.
TRANSPORTATION ENGINEERS, INC.
10441 Shoemaker Ave., Detroit, Mich.

DOUBLE SAFETY · POSITIVE TRACTION · DOUBLE MILEAGE

McKay Multi-Grip
Double-Bar-Reinforced
Truck Chains
THE McKAY COMPANY
McKAY BLDG. PITTSBURGH, PA.

Motor Tune-Up
is a real profit and business building service.
Send for free Tune-Up Charts
CARTER CARBURETOR CORP.
2820-56 N. Spring Ave. St. Louis

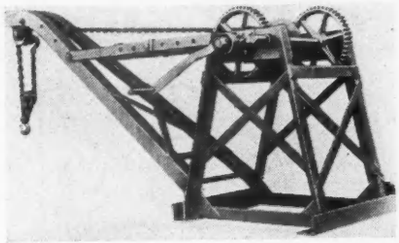
HERCULES POWER
Hercules Engines, both gasoline and Diesel, have long been standard equipment on many leading makes of trucks, truck tractors and delivery units as well as urban and interurban buses, road building and maintenance equipment, industrial, oil field and agricultural machinery. Hercules provides an engineering service which includes a study of specialized power applications.
HERCULES MOTORS CORPORATION
Canton, Ohio, U.S.A.
America's Foremost Engine Manufacturer
Power Plants from 4 to 200 HP.

GRAMM POWER PLANTS
consisting of engine, transmission, clutch, and all accessories ready to drop in old truck.
Fleet owners and Dealers write for prices.
GRAMM MOTOR TRUCK CORP.
DELPHOS, OHIO

THIS AD
IS LARGE ENOUGH TO REMIND YOU THAT FITZGERALD GASKETS GIVE BETTER SERVICE.
THE FITZGERALD MFG. CO., TORRINGTON, CONN.
FITZGERALD GASKETS

Little Giant Crane

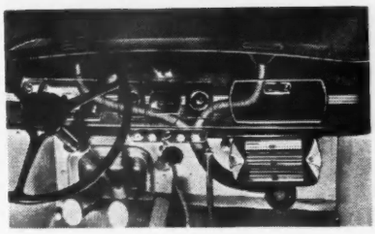
LITTLE Giant Products, Inc., Peoria, Ill., has announced a new wrecking crane which features a dual speed arrangement providing power when needed and speed when desired. Other features include an auto-



matic safety lock, an adjustable boom varying from 2 ft. to 5 ft. 4 in. Chain is standard equipment, cable optional, and either 2½ or 3-ton sizes are available.

Chanson Heaters

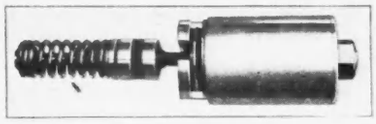
CHANSON Power-driven defrosters form the major improvement in the new heater line just introduced by Chanson Division, Illinois Iron & Bolt Co., Carpentersville,



Ill. The new defrosters are designed to fit all 1937 cars with slotted cowls or may be attached to older models by suction cups. A separate blower supplies warm air under pressure to the ducts and is said not to detract from the main flow of heat.

Ford Valve Puller

SNAP-ON Tools, Inc., Kenosha, Wis., offers a new device for removing Ford V-8 valve assemblies. Once the valve spring is compressed the puller may be slipped over the



valve head. Tightening the nut at the end of the tool quickly removes the entire assembly.

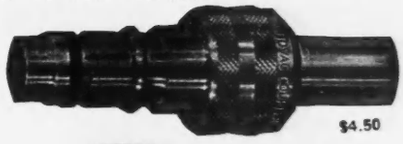
Buffalo Extinguisher

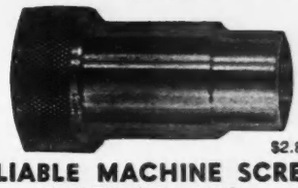
BUFFALO Fire Appliance Corp., 44 Central Avenue, Buffalo, N. Y., announces a new 1 quart C.T.C. type fire extinguisher. Features include: a patented moisture-proof breather designed to prevent corrosion, forged brass pump handle, leak-proof shut-off valve, heavy seamless drawn brass shell, double acting pump, and double-end pick up. Especially designed for trucks, atuomobiles, garages, or wherever there is an electrical fire hazard, it has been tested, and approved, by the Underwriters Lab.

(Turn to Next Page, Please)

THE ROBINSON . . . . .
UNIVERSAL COUPLING HOLDER
● HOLDS SECURELY
● SUPPORTS HOSE
● SEALS FROM DIRT
• Fits all standard type couplings. . . . Protects male coupling from damage which destroys brake efficiency.
$1.25 LIST PRICE

THE ROBINSON AUTOVAC COUPLER . . . .
Connected . . . *Autovac* is fully open! Disconnected . . . *Autovac* is tightly closed! No valve to turn off . . . nothing left to chance. Saves time and money. Autovac protects hose lines and mechanism from water and dirt . . . it's automatically sealed when not in use.
Furnished in 3 sizes ⅜, ½, ¾ inch. MALE $4.50. FEMALE $2.80.


$4.50


$2.80

RELIABLE MACHINE SCREW SALES CO., INC.
NEWARK, NEW JERSEY

Edison
Spark Plugs
The Choice of National Fleets
EDISON-SPLITDORF CORPORATION
West Orange New Jersey

DISTRIBUTOR WANTED
Superior Trailers will make money for you. They are honestly built and competitively priced. Nationally financed through C.I.T. No factory competition. A few protected territories open to established truck distributors. Write to Superior Trailer Corp., Indianapolis, Ind.
SUPERIOR TRAILERS

When writing to advertisers please mention Commercial Car Journal

JONES PORTABLE TACHOMETER

The world's largest operators of commercial vehicles use Jones Portable Tachometers to check engine speeds, for tune-ups, and setting governors, etc. Here are a few: Standard Oil Co., of La., N. J., N. Y.; Shell Petroleum Co., Atlantic Refining Company, Tidewater Oil Company, Keeshin Motor Express, Mack Trucks, Brockway, U. S. Navy.

Direct, instantaneous reading.

JONES - MOTROLA - NEW YORK
450 WHITLOCK AVENUE

McCORD REFRIGERATION
—FUEL SYSTEM
FOR TRUCKS
REFRIGERATION
AT NO COST
—BY THE FUEL
THAT RUNS THE MOTOR

McCORD RADIATOR AND MFG. CO.
DETROIT

FULLER
TRUCK TRANSMISSIONS

For easy shifting, quiet operation, hauling power and dependability, be sure to choose trucks equipped with FULLER'S.

FULLER MFG. CO.
KALAMAZOO, MICH.

NIEHOFF
T-5
TIMING LIGHT

A service instrument invaluable for quick and accurate checking of ignition timing and synchronization. Also detects deficient governor action, worn distributor shafts and bearings. Compactly designed to slip easily between fan assembly and engine and into other close quarters.

DEALER'S PRICE. . . . $3.85

Write for complete details

C. E. NIEHOFF & CO.
230 W. SUPERIOR ST., CHICAGO, ILL.

MARMON-HERRINGTON
BUILDS BETTER
All-Wheel-Drives

...BETTER IN PERFORMANCE
...BETTER IN ENGINEERING
...BETTER IN ECONOMY

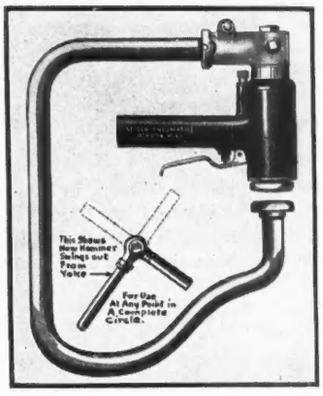
Write for Literature, Specifications and Prices

MARMON-HERRINGTON COMPANY, Inc., Indianapolis, Ind.

(CONTINUED FROM PAGE 115)

Improved Seiden Hammer

TOMPKINS-JOHNSON Co., Jackson, Mich., has developed a series of special flexible yokes and anvils for use with their Seiden pneumatic hammer. The yokes are especially designed to reach hard-to-get-at body and fender places, and their flexibility absorbs much of the shock otherwise directed to the operator. The improved hammer, which delivers 6000 blows per min. or only 60 to 90 lb. pressure, may be used separately with regular dolly blocks if so desired.

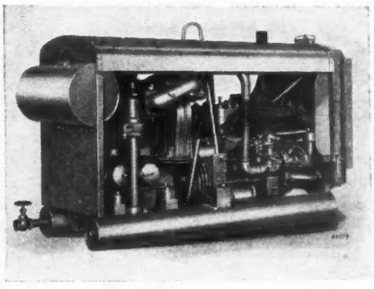


Bendable Tail Pipe

PRATT Industries, Inc., Frankfort, N. Y., has developed a new universal tail pipe so constituted that it will bend readily in a vise and stay bent without snapping back, kinking or breaking. The construction, which resembles ordinary flexible tubing, is such that when bent, the spiral convolution on the outside of the bend flattens and the corresponding convolution on the inside of the bend squeezes together. On each end is welded a 10-in. section of plain pipe to allow for sawing off and to give the pipe a conventional appearance when installed. Furnished in 1½ or 1¾-in. diameters, in lengths of 62, 76 or 92 in.

I-R Compact Compressor

INGERSOLL-RAND Co., 11 Broadway, N. Y., has developed a new compact and self-contained utility compressor designed for cross-wise mounting on the truck in order that remaining space may be utilized for other purposes. The unit is powered by a 4 cyl. Waukesha gasoline engine and delivers 105 cu. ft. of air per min. at 100 lb. pressure. It's dimensions are 6 ft. 7 in. x 2 ft. 3½ in. and total weight 2100 lb. complete with lifting bale.



HUG

—the trucks that are
"BUILT TO MEET
A CONDITION"
THE **HUG** COMPANY
Highland • Illinois

DOUBLE TIRE LIFE
WITH
DRAKE
TIRE REGROOVERS

● Rugged Construction.
● Price complete with stand—4 blades—6' rubber cord only **$5.00**

150 Watt Heating Head

Send at once for catalog

DRAKE ELECTRIC WORKS, INC.
3656 LINCOLN AVE. CHICAGO, ILL.

You Can't Fool the Factories..
● They know what's best for production and service. That's why 32 leading factories and thousands of service shops have adopted ECONOMIC Valve Seat Grinding. You can't go wrong on service equipment if you follow the factories. Ask your Jobber.
O K'd

ECONOMIC VALVE SEAT GRINDER

Classified Advertising

SAFETY DEVICE SALESMAN, experienced to sell nationally known Electric Safety Flare direct to truck fleets, bus lines, truck and trailer manufacturers, Government Purchasing Departments. Good opportunity for aggressive man. Write, stating experience and qualifications. Box 1710, Commercial Car Journal.

COMMERCIAL CAR JOURNAL

Is the Leading Publication in the TRUCK FLEET Field